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This bibliography, containing professional information in agricultural education published in the school years 1964-65 and 1965-66 was prepared by the Professional Information Committee of the Agricultural Division of the American Vocational Association. Respectively they contain 141 and 170 listings with short annotations including availability and price, and are organized under headings of: (1) Adult and Post High School Education, (2) Agricultural Mechanics, (3) Animal Science, (4) Curriculum Development, (5) Facilities for Department, (6) Farm Business, Management, Marketing, (7) Forestry, (8) Future Farmers of America, (9) Guidance and Occupational Opportunities, (10) Plant Science and Soils, (11) Supervision and Teacher Education, (12) Supervised Practice, and (13) Teaching Aids and Materials. Similar bibliographies for the years 1967-68, 1968-69 are available as VT 007 903. (DM)

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A DESCRIPTION AND SOURCE LISTING OF PROFESSIONAL INFORMATION IN AGRICULTURAL EDUCATION

Developed and published by the Professional Information
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AGRICULTURAL EDUCATION
CURRICULUM MATERIAL SERVICE
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1964-65

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ADULT EDUCATION

ADULT COURSE OF STUDY IN HOME BEAUTIFICATION, FARM MANAGEMENT AND BEEF PRODUCTION. Howard H. Christensen, Agricultural Economics and Agricultural Education Departments, College of Agriculture, University of Nevada, Reno, Nevada; January 1964; Free while they last. The three areas are broken down into ten lessons with helpful content for teaching an adult course.

FINAL REPORT OF INSTITUTIONAL ON-FARM TRAINING PROGRAM IN WEST VIRGINIA. John M. Lowe, State Department of Education, Vocational Agriculture, Capitol Building, Room W-414, Charleston, West Virginia. One copy free.

LIVESTOCK FEEDS AND FEEDING, AF 5.1. Milton B. Wise and W. W. McClure, Curriculum Laboratory, Department of Community Colleges, Raleigh, North Carolina; September 1964; Single copies free to supervisors and teacher trainers. A teaching outline on fundamentals of livestock feeds and feeding designed for 20 hours of instruction, primarily for adult farmers.

LIVESTOCK SANITATION AND DISEASE CONTROL, AF 5.0. Edward G. Batte and W. W. McClure, Curriculum Laboratory, Department of Community Colleges, Raleigh, North Carolina; October 1964; Single copies free to supervisors and teacher trainers. A teaching outline on principles of livestock sanitation and disease control, with suggestions for herd health programs for swine, dairy and beef farms. Designed primarily for adult farmer short course.

NEW PERSPECTIVES IN FARMER AND RANCHER EDUCATION (Publication No. 4). J. D. McComas and A. C. Bjergo, Department of Agricultural and Extension Education, New Mexico State University; February 1964; Price $1.50 limited number of copies available. An agricultural education report of the Southwestern Conference on Young-Adult Farmer and Rancher Education, directed by R. J. Woodin. Encompasses suggestions for the development and improvement of adult programs, 76 pages.

ORGANIZING AND PLANNING AN ADULT FARMER COURSE USING PHIPP'S FACE TO FACE PLAN. I. C. Rogers, Phillips High School, Vocational Agriculture Department, Brattleboro, North Carolina; Fall 1963; free.

PLANNING AN INSTRUCTIONAL PROGRAM FOR YOUNG FARMERS WITH EMPHASIS ON FARM BUSINESS MANAGEMENT. Instructional Materials Staff, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York. 1964; One copy free to state supervisors and teacher educators. A monograph designed to encourage teachers to organize young farmer instructional programs to meet business management needs by encouraging systematic keeping and use of farm records to improve the business.

A TRAINING PROGRAM FOR GENERAL FARM LABORERS. Guy E. Cain, Assistant State Supervisor of Vocational Agriculture, State Department of Education, Capitol Building, Room W-414, Charleston, West Virginia. One copy free.

AGRICULTURAL MECHANICS

BASIC CONTENT FOR AGRICULTURAL MECHANICS. Report of a special committee, Bureau of Agricultural Education, State Department of Education, Sacramento, California; June 1964; No charge for single copy. Used in developing a course of study in agricultural mechanics. Set up in terms of outcomes and what everyone completing a course in agricultural mechanics should understand or know or be able to do.

BUILDING FARM FENCES. G. E. Henderson, and C. E. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1962; Price 80 cents. Contains 36 pages, 140 illustrations, two colors. Gives step-by-step procedures for building wire and board fences. Shows how to provide lightning protection and fence across gullies, streams and marshes. Each step is illustrated and can be easily followed.

ELECTRICAL TERMS - THEIR MEANING AND USE. G. E. Henderson and C. E. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1962; Price 85 cents. Contains 36 pages, 75 illustrations, three colors. Terms are explained then used in practical illustrations to show their value in everyday understanding of electricity. Includes a table which lists 122 pieces of farm and home electrical equipment and the approximate kilowatt-hour usage.

FARM BUILDING APPRAISAL, VAS UNIT 3017. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1965; 36 cents postpaid (write for quantity prices). This 24 page subject matter unit discusses the problems of farm building appraisal, and methods of appraisal. Four procedures for appraising buildings are described. Engineering analysis score sheets are included for most farm buildings to serve as a guide when appraising a particular building.

FARM ELECTRIC MOTORS, SELECTION - PROTECTION - DRIVES. G. E. Henderson and C. E. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1964; Price 65 cents. Contains 36 pages, 82 illustrations, two colors. A non-technical publication containing information any farmer should know about single phase motors commonly used on farms, their capacities and limitations for farm use, what protection to provide - electrically and mechanically, and how to properly connect them to driven machines.

FARM TRACTOR HITCHING AND WEIGHT TRANSFER, Agdex 764. Jerry J. Halterman (Modesto Junior College, Modesto, California) Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio; 1964; Price 64 cents, 20 pages. The purpose of this manual is to present a few of the basic physical principles and relationships of the many forces that are involved in weight transfer and hitching. The concepts are presented both graphically and mathematically as an aid to understanding. Some common misconceptions about the three point hitch are explained. The importance of tractor weight and weight transfer is also discussed.

FARM TRACTOR TUNE-UP AND SERVICE GUIDE. J. Howard Turner and G. E. Henderson, Southern Association for Agricultural Engineering and Vocational Agriculture; 1964; Price $1.85. Contains 19 pages, 17 of which are 11 x 23" folded into an 8 1/2 x 11" binding, two colors. A complete reference for on-the-farm tractor maintenance giving critical and adjustment data and lubrication recommendations, such as: valve-tappet clearances, ignition timing recommendations, fan and generator-belt deflections, oil capacities, types and viscosities for the crankcase and hydraulic system and other parts of the tractor.

A GUIDE FOR DEVELOPING THE INSTRUCTIONAL PROGRAM IN AGRICULTURAL MECHANICS, Misc. 28A. Board of Vocational Education and Rehabilitation, 405 Centennial Building, Springfield, Illinois; July 1964; One copy available without charge as long as the supply lasts. The bulletin contains material that can be used to improve instruction in Agricultural Mechanics. It contains material of a suggestive nature which may need local adaption. There is a wealth of "what" to teach and also an unusual quantity of material on "how" to teach Agricultural Mechanics. Many variations can be developed locally from the examples included.

HOW TO BUILD A TRAILER LOADING CHUTE. Curtis R. Weston, Lee Fitchett, and William C. George, Teaching Aids Fund for Vocational Agriculture, 22 Waters Hall, University of Missouri, Columbia, Missouri; January 1964; Price 25 cents each. A 14 page bulletin describing how to build a trailer loading chute. Illustrated by pictures and drawings. Also includes alternate plans, with bill of material.

SLIDE FILMS:
450-64, LEARNING ARC WELDING SKILLS - I Process, Equipment and Safety (45 frames)
451-64, LEARNING ARC WELDING SKILLS - II Flat Position Welding (63 frames)
452-64, LEARNING ARC WELDING SKILLS - III Vertical, Overhead and Horizontal Position Welding (34 frames)

Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois: Price $5.06 for set of three films, postpaid. All three films in the series are single-frame color films. The first film describes the equipment used in arc welding and safety precautions to follow. The second film tells how to strike and hold the arc, run beads and how to make downhand, fillet, and lap and corner welds. The third film describes how to make out-of-position welds.

PLANNING AND DEVELOPING THE HOME FARM SHOP. R. W. Canada, Colorado State University, Fort Collins, Colorado; May 1964; limited quantity. Procedures for developing the home farm shop on a progressive basis.

PLANNING WATER SYSTEMS FOR FARM AND HOME. G. E. Henderson and C. E. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1963; Price $2.60. Contains 108 pages, approximately 150 illustrations, two colors. Combines practical information from several different specialized fields into one book for those interested in the overall problem of a properly installed farm water system. Includes information on water needs, possible water sources, purification, water conditioning, selecting a water system to meet particular needs, where to place water outlets, how to meet pollution problems, what weather protection to provide, what size and type pipe to use and what wiring to use.

THE PORTABLE ELECTRIC SAW — HOW TO USE IT SAFELY, SLIDEFILM 465. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1964; Price $2.86 postpaid. This is a color single-frame slidefilm of 57 frames. The film identifies the parts of the saw and gives some suggestions as to the size of saw to select for various jobs. It shows the blades used with the saw to cut different materials. Special applications such as butt cuts, lap joints, notching and angle cuts are shown. The film emphasizes safety precautions to follow when using the saw.

THE POWER GRINDER — HOW TO USE IT SAFELY, SLIDEFILM 463. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; March 1964; Price $2.62 postpaid. This is a color single-frame slidefilm of 48 frames. It includes descriptions of various types of grinders and suggestions to follow when selecting a grinder. The film lists safety checks, adjustments and safety precautions to follow when using the grinder.

SAFE CHAIN SAW OPERATION. Raymond M. Clark and Lester Bell, MATVA, 340 Erickson Hall, Michigan State University; May 1964; Price $16.00. Produced primarily for FFA members and others who are learning forestry practices. Pictures were taken in a woodlot in a land laboratory near Lansing, Michigan. Boys in the pictures are FFA members. These slides are distributed by Raymond M. Clark for the Michigan Association of Teachers of Vocational Agriculture.

THE SAFE USE AND CARE OF LADDERS, SLIDEFILM 497. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1965; Price 92¢ postpaid. This is a black and white, single-frame slidefilm of 42 frames. This film describes the safe use of step ladders, straight and extension ladders. It presents important safety measures to remember when erecting, climbing and working on ladders.

SELECTING AND STORING TRACTOR FUELS AND LUBRICANTS. G. E. Henderson and James H. Turner, Southern Association for Agriculture Engineering and Vocational Agriculture; 1964; Price $1.20. Discusses fuel ratings, compression ratios, fuel grades, contaminants, fuel storage, storage losses, safety, cost of storages, maintenance.

SOME SUGGESTED AGRICULTURAL MECHANICS ACTIVITIES RELATED TO ENTERPRISES IN A FARMING PROGRAM. Dr. Guy E. Timmons, Michigan State University, 338 Erickson Hall, East Lansing, Michigan; Fall 1963; single copies free. Two page mimeograph listing suggestive agricultural mechanics activities that might be involved in a typical livestock or crop enterprise.

SOME SUGGESTED BASIC AGRICULTURAL MECHANICS SKILLS FOR MICHIGAN. Dr. Guy E. Timmons, Michigan State University, 338 Erickson Hall, East Lansing, Michigan; Fall 1963; Single copies free. A four page mimeograph listing of suggestive skills that might be taught in each of the five broad areas of agricultural mechanics.

SPRAY PAINTING VISUALS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1964; 84¢ postpaid. This is a series of 50 instructional illustrations on spray painting. They are for use with an opaque projector, for making transparencies for overhead projection or for direct viewing. The set of visuals is contained in a manila pocket folder for filing.

A SUGGESTED PLAN OF A FOUR-YEAR AGRICULTURAL MECHANICS PROGRAM FOR MICHIGAN HIGH SCHOOLS. Dr. Guy E. Timmons, 338 College of Education, Michigan State University, East Lansing, Michigan; 1964; single copies free. Suggests units of work, teacher activities, student activities and time allotment for an agricultural mechanics program at the high school level.

TRACTOR MAINTENANCE - PRINCIPLES AND PROCEDURES. G. E. Henderson and James H. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1964; Price $3.25. Deals with the practical maintenance jobs that keep a tractor in top running condition--ones that both dealers and manufacturers expect a farmer to do. It tells "why" these jobs are important and what happens if they are neglected. Operating principles are discussed and illustrated along with the step-by-step procedures for doing the various jobs.

UNPACKING, CHECKING AND IDENTIFYING ELECTRICAL ITEMS, SLIDEFILM 404-64. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1964; Price $1.25 Postpaid. This black and white, single-frame slidefilm of 68 frames is useful when unpacking and checking items contained in the Vocational Agriculture Service Electrical Loan Box. It is also helpful in teaching identification of commonly used electrical items.

USING THE PORTABLE ELECTRIC CIRCULAR HAND SAW. M. G. McCreight and U. E. Wendorff, Department of Agricultural Education, 302 Agriculture Hall, College of Agriculture, University of Nebraska; July 1964; one copy free; supply limited. This circular covers four areas: (1) safety precautions, (2) identifying the parts of the saw, (3) operating the saw and (4) selecting the blade.

A SPECIAL COURSE IN SHOP, UNIT III, ARC WELDING, XLVI, NUMBER 6. A committee of teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August 1964; Supply exhausted: Except for a State Supervisor or Head Teacher Educator. This publication contains suggested objectives, references, facilities, and procedures for conducting an elementary course in arc welding.

SELECTED INFORMATION AND REFERENCES ON OBTAINING, OPERATING AND MAINTAINING SMALL ENGINES VOLUME XLV, NUMBER 3. Staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; January 1964; No charge. Supply exhausted except for a State Supervisor or Head Teacher Educator. Contains information and references organized around the subject matter areas in obtaining, operating, and maintaining small engines.

ANIMAL SCIENCE

BASIC PRINCIPLES OF ANIMAL SCIENCE (reference unit). L. P. Jacks, Agricultural Education Department, Mississippi State University, P. O. Box 1419, State College, Mississippi; October, 1963; single copies free to state supervisors and head teacher trainers. A reference unit for use in teaching basic principles of animal science in vocational agriculture courses.

CARING FOR THE SOW AND LITTER AT FARROWING TIME (VAS 1037). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November 1964; 12¢ postpaid (Write for quantity prices). This 8-page subject matter unit explains such care for the sow and litter as preparing the farrowing unit, preparing the sow for farrowing, caring for the sow at farrowing time, feeding the sow after farrowing, caring for the little pigs, and caring for large litters, and orphan pigs.

DAIRY HERD IMPROVEMENT HANDBOOK. Wisconsin Junior Dairymen's Association, National Farm Book Company, Viroqua, Wisconsin; Fall 1964; 75¢ each, single copies available to supervisors and teacher trainers from Doyle Beyl, Vocational Agriculture Supervisor, State Board of Vocational and Adult Education, Madison, Wisconsin. A 28-page handbook covering ALL phases of dairy records including computation of butterfat records, breeding records, culling guide and cost analysis.

DAIRY HERD RECORD STUDY GUIDE. Donald Ausman, Manager, Agricultural Records Cooperative, and Anton Sendelbach, Dairy Science Department, University of Wisconsin, Madison, Wisconsin; Fall 1964; single copies available from Doyle Beyl, Vocational Agriculture Supervisor, State Board of Vocational and Adult Education, Madison, Wisconsin. A 9-page study guide which includes a glossary of terms commonly used on electronically computed D.H.I.A. monthly reports and a section on how to use the D.H.I.A. monthly reports in feeding, management and breeding.

DAIRYING FOR PROFIT (AF 5). William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963; $1.00, single copy free available to state staffs. A 117 page course outline for use in adult farmer classes. The 16 suggested lessons include a teaching plan and a considerable amount of data and reference material for teacher use.

SLIDES TO ACCOMPANY DAIRYING FOR PROFIT (AF 5) - Syllabus included. William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1964; $9.90. These 66 slides including illustrations, data, field scenes, etc. were developed especially for use with the adult farmer course in dairying (AF 5). Slides are coded and marked according to the lesson they accompany.

FEEDING LIVESTOCK (HS 35). Staff, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963.

GENERAL FACTS ON LIVESTOCK FEEDING (SCRAMBLED BOOK NO. 103). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February, 1964; 22¢ postpaid (Write for quantity prices). The text of this 44-page scrambled book was taken from VAS Unit 1013, but programmed as a "teaching machine." It includes nutrients and their uses, characteristics of a good ration, and methods of formulating and balancing rations.

MAINTAINING ANIMAL HEALTH SU-4. Robert V. Kerwood, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; June, 1964; free. Source Unit Dealing with Animal Health.

MAKING THE BUTTERFAT TEST (VAS 1008a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 12¢ postpaid (Write for quantity prices). This 8-page subject-matter unit gives a brief description of the different tests and explains and illustrates the various steps of the Babcock test. A small section is included on figuring the pounds of butterfat per cow after the test has been made.

MAKING THE BUTTERFAT TEST (SCRAMBLED BOOK NO. 105). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 22¢ postpaid (Write for quantity prices). The text of this 30-page scrambled book was taken from VAS Unit 1008a, but programmed as a "teaching machine." It includes a brief description of different butterfat tests and explains the steps in making the Babcock test.

MANAGING THE DAIRY ENTERPRISE. A. J. Paulus, Consultation teaching staff, Department of Agricultural Education, University of Tennessee, Knoxville, Tennessee; January, 1965; for teacher use in classroom and individual study, limited number available from Department of Agriculture, 308 Morgan Hall, University of Tennessee, Knoxville, Tennessee. About 400 pages, offset. Many tables and illustrations. Fifteen jobs: 1) Determining Possibilities, 2) Choosing Breed, 3) Breeding Program, 4) Selecting and Judging, 5) Managing Herd, 6) Records, 7) Feeding, 8) Shelter and Equipment, 9) Health, 10) Milking, 11) Marketing, 12) Dry Cows, 13) Freshening, 14) Replacements, and 15) Fitting and Showing.

MINERALS FOR LIVESTOCK (SCRAMBLED BOOK NO. 104). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February, 1964; 22¢ postpaid (Write for quantity prices). The text of this 52-page scrambled book was taken from VAS Unit 1018, but programmed as a "teaching machine." It includes a list of minerals likely to be deficient in livestock rations, minerals needed by different classes of livestock, and a discussion of mixtures of minerals to feed.

PRODUCING PORK FOR PROFIT (AF-6). William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1964; $1.00, supplied free to teachers in Kentucky, single copies supplied on request by other states. A 89-page multilithed course designed especially for teacher use in adult farmer classes. The thirteen lesson plans include a rather extensive amount of research data and other content material.

QUALITY MILK PRODUCTION, A TEACHER'S UNIT PLAN, TEACHER EDUCATION RESEARCH SERIES, VOLUME V, NUMBER 1, 1964. Gene M. Love, Russell A. Weller, and Glenn Z. Stevens, Department of Agricultural Education, 101 Agricultural Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802; 1964; 40¢. A teaching unit prepared for teachers. It includes six problem areas. Suggested student activities are outlined for each problem area. An extensive list of teaching aids and learning resources has been compiled.

QUALITY MILK PRODUCTION, A STUDENT'S RESOURCE UNIT, TEACHER EDUCATION RESEARCH SERIES, VOLUME V, NUMBER 2, 1964. Gene M. Love, Russell A. Weller, and Glenn S. Stevens, Department of Agricultural Education, 101 Agricultural Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802; 1964; $1.00. This is an 83-page booklet of resource information compiled according to six problem areas. The booklet was written for the information of teachers and students studying a unit on Quality Milk Production. It supports Quality Milk Production, A Teacher's Unit Plan, Teacher Education series, Volume V, Number 1.

SLIDEFILM NO. 166-64, SELECTING BREEDING HOGS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; $1.33 postpaid. This is a black and white, single-frame slidefilm of 74 frames. It shows the parts of a hog, and points to look for in selecting sows, boars, and young stock.

SOURCE UNITS FOR THE DAIRY ENTERPRISE. Raymond Clark, William Householder, Donald Murray, and Donald Hillman, Office of Publications, College of Education, Michigan State University, East Lansing, Michigan; November, 1964; $1.50. Suggestions to teachers for teaching units in the dairy enterprise. Includes suggestions as to content, visual aids and student activities.

SOURCE UNITS FOR THE SWINE ENTERPRISE. Raymond M. Clark and Graydon Blank, Office of Publications, College of Education, Michigan State University, East Lansing, Michigan; October, 1964; $1.50. A set of 8 mimeographed units designed for use by Michigan teachers of vocational agriculture. Units are bound in a paper cover. Colors of paper distinguish the units.

SUGGESTED LIST OF SUPERIOR PRACTICES IN LIVESTOCK PRODUCTION (TA-41). Robert V. Kerwood and Leo C. Pennington, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; June, 1964; free. Teaching aid concerning livestock practices.

VETERINARY SCIENCE CLASS. A. E. McChesney, Agricultural Education Department, Montana State College, Bozeman, Montana; 1965 revision; 80¢. 66 pages. Outline for 10 lessons for an adult class in Veterinary Science to be taught by a local veterinarian, suitable for high school class instruction.

MANAGEMENT RECOMMENDATIONS FOR RAISING DAIRY CALVES. Neil C. Brasure - Edited by Ralph P. Barwick, Department of Agricultural Education, School of Agriculture, University of Delaware, Newark, Delaware; Fall 1964; single copies - free one copy per request outside the State of Delaware. An aid in developing approved practices with boys having dairy as a part of their supervised farming program. Also helpful in adult programs.

CURRICULUM DEVELOPMENT

AGRICULTURAL MECHANICS INSTRUCTION IN SECONDARY SCHOOLS. G. M. Walker and G. G. Powell, Jr., Agricultural Education Department, Mississippi State University, P. O. Box 1419, State College, Mississippi; January, 1964; single free copy to head teacher trainers and state supervisors of agricultural education. Deals with organization of laboratory-work areas. A state approved new and more efficient approach to teaching agricultural mechanics in vocational agricultural departments in Mississippi.

AGRICULTURAL TECHNOLOGY SHORT COURSES. J. H. Blackmon and C. G. Dawson, Curriculum Laboratory, Department of Community Colleges, Raleigh, North Carolina; July, 1964; free single copies available to supervisors, teacher trainers and technical institutes. A 15-page bulletin listing and describing the pre-employment and upgrading courses available in Agricultural Technology Education through the Department of Community Colleges in North Carolina.

AGRICULTURE I, UNIT I, ORIENTATION TO AGRICULTURE, VOLUME XLVI, NUMBER 1. Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; No charge. Supply is exhausted except for file copies for State Supervisors. In the revised Vocational Agriculture Curriculum for Georgia High Schools, Orientation to Agriculture is one of the principal areas dealt with during the first year. This bulletin provides suggested procedures and ways and means for dealing with orientation.

AGRICULTURE FOR THE JUNIOR HIGH SCHOOL. Vocational Curriculum Committee, Bureau of Agricultural Education, State Education Department, Albany, New York; September 1963; single copy free to state leaders. A suggested course of study in agriculture for grades seven and eight. Experiences in agriculture as exploration in an occupational field for practical arts development and as desirable general education.

AGRICULTURE FOR THE NINTH AND TENTH GRADES (a) SUGGESTED COURSE OUTLINE FOR AGRICULTURE 1 (b) SUGGESTED COURSE OUTLINE FOR AGRICULTURE 2. Joint Staff Committee, Bureau of Agricultural Education, State Education Department, Albany, New York; June, 1964; single copy free to state staff members. An explanation of a changed program in which the first two years of agriculture become an introduction, including a scientific basis and preparation for selection of one of five specialties for the junior and senior years.

COURSE OUTLINES. Vocational Agriculture Teachers and State Staff, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964; multigraph - single copies of all nine or single copies of individual units available upon request. Course units on: "Introduction to Dairying," "Corn Silage," "Grass and Legume Silage," "Pasture Management," "Program of Instruction for Soil Science," "Apples," "Fattening Beef Cattle," "Advanced Feeds and Feeding" (Beef, Sheep and Swine).

AN EXPERIMENTAL CURRICULUM IN VOCATIONAL AGRICULTURE, JANESVILLE, WISCONSIN. J. W. Hensel, and W. J. Becker, Department of Agricultural and Extension Education, University of Wisconsin, Madison, Wisconsin; June, 1964; free single copies. Report of a pilot program offering five different agricultural subjects each semester over a two-year period.

FARM BUSINESS MANAGEMENT, A SAMPLE PROCEDURE FOR ORGANIZING COURSE OUTLINES. G. R. Fuller, Agricultural Education Division, University of Illinois, Urbana, Illinois; July, 1963; 50¢. Guiding principles, an organizational approach, and a sample 4-year partial course outline. 21 pp.

HANDBOOK FOR DEVELOPING AND OPERATING AGRICULTURE OCCUPATIONS PROGRAMS. M. G. Linson and Harold Anderson, State Office, State Board for Vocational Education, 510 State Office Building, Denver, Colorado 80302; September, 1964; single copies to state personnel. A guide for developing new agricultural programs in the public schools and for revising the existing programs to meet the expanded objectives. The guide outlines procedures for organizing an agricultural occupation program and also suggests the ways and means. Also included in the guide are various forms, lists and other materials that might be useful in organizing and administrating an occupation training program.

HANDBOOK FOR DEVELOPING AND OPERATING AGRICULTURAL OCCUPATIONS PROGRAMS. State Staffs in Agricultural Education, M. G. Linson, State Supervisor of Agricultural Education, 5th floor, State Office Building, Denver, Colorado; October, 1964; limited quantity. A handbook for use in surveying, organizing and conducting programs in non-farm agricultural occupations. 114 pp.

PRINCIPLES AND GUIDELINES FOR COURSE PLANNING IN VOCATIONAL AGRICULTURE. R. A. Baker, Department of Vocational, Technical and Practical Arts Education, Auburn University, Auburn, Alabama; 1964; free to teacher educators and supervisors, permission granted to duplicate all or any portion. Publication contains worksheets for use in making instructional program adjustments or for planning and organizing new courses. Worksheet reflects instructional unit content for Agricultural Production, Mechanics and Business.

RESIDENT INSTRUCTION SERIES I, INSIDE THE HATCH VALLEY--A STUDY OF A RURAL NEW MEXICO COMMUNITY, 60 pp. J. D. McComas, et al., Department of Agricultural and Extension Education, New Mexico State University; October, 1964;$1.50. Limited number of copies available. A sociological study of a rural community. Study focuses on church, school, civic organization, business, agriculture and community power structure.

SOME GUIDELINES FOR CONDUCTING A SPECIAL COURSE IN SHOP. Committee of Teachers and Staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; no charge, supply exhausted except for file copies for State Supervisors. This publication contains guidelines for conducting a special course in mechanics.

A SPECIAL COURSE IN SHOP, UNIT I, WOODWORKING, XLVI, NUMBER 4. Committee of teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; no charge, supply exhausted except for file copies for State Supervisors. This publication contains suggested objectives, references, facilities, and procedures for conducting an elementary course in Woodworking.

A SPECIAL COURSE IN SHOP, UNIT II, TOOL RECONDITIONING, XLVI, NUMBER 5. Committee of teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; no charge, supply exhausted except for file copies. This publication contains suggested objectives, references, facilities, and procedures for conducting an elementary course in Tool Reconditioning.

A TENTATIVE GUIDE FOR AGRICULTURAL EDUCATION I - IV, GRADES 9 - 12. Special Study Guide Committee, Vocational Agricultural Education, Department of Public Instruction, Helena, Montana; August, 1964; free copies available to supervisors and teacher trainers. Curriculum Study Guide in Agricultural Education for Montana Vocational Agriculture Departments.

VOCATIONAL AGRICULTURE CURRICULUM FOR GEORGIA HIGH SCHOOLS, PROFESSIONAL SERIES BULLETIN #6. Committee of teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; July, 1964; no charge, supply exhausted except for file copies for State Supervisors. The report provides the framework around which local school leaders may plan a curriculum to fit local needs.

FACILITIES FOR DEPARTMENTS

GUIDING PRINCIPLES IN DEVELOPING SCHOOL CENTERS FOR PROVIDING SUPERVISED OCCUPATIONAL EXPERIENCES IN AGRICULTURE. Jesse A. Taft, Project Leader, North Atlantic Regional Conference, Standards and Policies Committee, Agricultural Education, State Department of Education, 200 Newbury Street, Boston 02116. Free.

FARM BUSINESS, MANAGEMENT, MARKETING

AGRICULTURAL CREDIT - A RESOURCE UNIT. Douglas C. Towne, Part-time Instructional Materials Specialist, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; January, 1965; single copy free. A resource unit for use by teachers of agriculture in teaching agriculture credit to all-day and young farmer groups. Part I is the text of related materials to be used, and Part II provides for visualizing the unit. Part II includes six prepared plates designed for the local teachers to photo-copy in producing overhead projector transparencies.

ANALYZING FARM RECORDS TO INCREASE FARM INCOME (AF-4). William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentudky; 1963; free. A 23-page multilithed outline for use in adult farmer classes in analyzing their farm businesses.

CAPITALISM, SOCIALISM, AND COMMUNISM (VAS 2038). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 18¢ postpaid (Write for quantity prices). This 12-page subject-matter unit compares capitalism with socialism-communism as to ownership of property, freedom of enterprise, economic incentives, the price system, and competition.

THE CASE FOR FARM RECORDS SU-6. Robert V. Kerwood, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; December, 1963; free, no copies available at present. Source Unit on Farm Records.

FARM BUSINESS MANAGEMENT. G. R. Fuller, Agricultural Education Division, University of Illinois, Urbana, Illinois; July, 1964; 50¢. Source Materials for providing systematic instruction for farmers, agricultural businessmen and high school students. 25 pp.

FINANCING THE FARM BUSINESS. William L. Hull, Farm Credit Banks, Baltimore, Maryland; May, 1964; $1.25. A teacher's unit plan for teaching a unit in Farm Credit. 62 pp.

SLIDEFILM NO. 380, INSURANCE IN THE FARM BUSINESS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; March, 1964; $3.00 postpaid. This slidefilm is in color and contains 47 frames. It was prepared by Country Companies Insurance in cooperation with Vocational Agriculture Service. It includes the general principles covering the various kinds of insurance, with examples from life, fire, crop-hail, comprehensive liability, and hospital and medical insurance.

INVENTORY YOUR RESOURCES FOR FARM PLANNING (VAS 2002a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 18¢ postpaid (Write for quantity prices). This 12-page subject matter unit tells how to take an inventory of land, labor, and capital in appraising these resources for farm planning. Points are also included for appraising one's ability as a farm manager.

MERCHANDISING PRODUCTS USED IN THE FARM BUSINESS, AGDEX 835. Harlan E. Ridenour, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1964; 75¢. The material presented in this unit is not intended to exhaust the subject of merchandising but to point out some of the more common problems faced by people working in farm related businesses. Some of the principles and procedures of merchandising are covered for the benefit of those students who are completing a part of their vocational agriculture work experience requirements by working in local farm supply business.

REPORT OF A WORKSHOP - FARM BUSINESS MANAGEMENT IN AGRICULTURAL EDUCATION. Staff, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; May, 1964. Reports the proceedings of the North Atlantic Regional Farm Business Management Workshop for Agricultural Educators held at Cornell University in June of 1963.

SUBJECT MATTER MATERIALS FOR USE IN FARM BUSINESS MANAGEMENT. Robert J. Kerwood, Agricultural Education Department, West Virginia University; July, 1964; free. Teaching aid concerning farm business management.

USING COOPERATIVES TO INCREASE INCOME (HS 76). Staff, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963.

WHAT RECORDS TELL ABOUT THIS FARM, SLIDEFILM NO. 357. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January, 1964; $3.91 postpaid. This slide film is in color and contains 63 frames. It shows the kinds of measures that can be obtained for a farm through record analysis. It is intended to serve partly as a motivation for keeping records sufficiently complete and accurate so that an analysis can be made. Some frames are included on "troubleshooting" the farm business.

FORESTRY

CHRISTMAS TREE PRODUCTION TA-39. Leo C. Pennington, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; June, 1964; free. Source Unit on Christmas Tree Production.

HIGH SCHOOL FORESTRY - A ONE YEAR COURSE OF STUDY. Richard Howell, State Board for Vocational Education, Agricultural Education, P. O. Box 250. Olympia, Washington; 1964; single copies available upon request.

FUTURE FARMERS OF AMERICA

BECOMING ACQUAINTED WITH THE FFA (HS 90). Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963.

COOPERATION BETWEEN FFA CHAPTERS AND SOIL CONSERVATION DISTRICTS. W. H. Wayman, State Department of Education, Vocational Agriculture, Capitol Building, Room W-414, Charleston, West Virginia 25305; single free copies.

DEVELOPING QUALITIES OF DEMOCRATIC LEADERSHIP (HS 91). Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963.

PLANNING AND CARRYING OUT YOUR FFA CHAPTER PROGRAM OF ACTIVITIES - Cornell Miscellaneous Bulletin 53. Harold R. Cushman, Mailing Room, Stone Hall, Cornell University, Ithaca, New York; January, 1964; single copy free - additional copies 30¢. Description of recommended ways and means of planning the Chapter's program of activities. Includes activities carried on by the award winning chapters of New York State.

SUBSIDIARY MOTIONS--PARLIAMENTARY PROCEDURE NO. 2 (Scrambled Book No. 502). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 22¢ postpaid (Write for quantity prices). The text of this 50-page scrambled book was taken from A Guide to Parliamentary Practices, but was programmed as a "teaching machine." It includes the subsidiary motions, to lay on the table, call for the previous question, limit or extend time for debate, postpone to a certain time, commit or refer, amend and postpone indefinitely.

WORKBOOK FOR THE PREPARATION OF AMERICAN FARMER APPLICATIONS. W. H. Wayman, State Department of Education, Vocational Agriculture, Capitol Building, Charleston, West Virginia 25305; single copy free.

GUIDANCE

AGRICULTURAL OCCUPATIONS INFORMATION. State Vocational Agricultural Staff, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964; single copies upon request - multigraph. Revision - Bibliography of books, films, bulletins, pamphlets, brochures, etc., available on agricultural occupations.

THE CHANGING OUTLOOK FOR AGRICULTURAL CAREER OPPORTUNITIES FOR HIGH SCHOOL YOUTH - NEW DIMENSIONS IN AGRICULTURE. Vocational Curriculum Project, Bureau of Agricultural Education, State Education Department, Albany, New York; June, 1964; single copy free to state staff members. A preliminary report of materials to be included in a bulletin prepared for guidance in agricultural occupations.

EXPLORING CAREERS IN MODERN AGRICULTURE RELATED TO LAND USE AND CONSERVATION. Glenn Z. Stevens, and David F. Shontz, Department of Agricultural Education, 101 Agricultural Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802; 1964; $1.00. A teacher's plan for use with ninth and tenth grade classes in vocational agriculture.

INFORMATION BULLETIN #4. Bert Brown, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964; single copies upon request. Current information on the importance of agriculture; 4th in a series - multigraph.

LET VOCATIONAL AGRICULTURE PREPARE YOU FOR A CAREER IN AGRICULTURE. Wisconsin Association of Vocational Agriculture Instructors, Mark Murray, Executive Secretary, Wisconsin Association of Vocational Agriculture Instructors, Cameron, Wisconsin; Spring 1964; 5¢ each, single copies available to supervisors and teacher trainers from Doyle Beyl, State Board of Vocational and Adult Education, Madison, Wisconsin. An eight-page brochure designed to stimulate interest in vocational agriculture among eighth grade students.

A LIST OF SELECTED PUBLICATIONS PERTAINING TO TEACHING AGRICULTURAL OCCUPATIONS. Staff Publication, Bureau of Agricultural Education, State Education Department, Albany 1, New York; June, 1964; single copy free to state staff members. A listing of monographs and other guidance materials available from commercial sources, associations, public institutions, and governmental agencies.

OPPORTUNITIES FOR YOU IN AGRICULTURAL EDUCATION. American Association of Teacher Education in Agriculture, Agricultural Education Department, Montana State College, Bozeman, Montana; 1963; 5¢ each 100 to 500; 4 1/2¢ each 500 to 1,000; 4¢ each 1,000 or more. Recruitment brochure for college trainees for teacher education in agriculture.

A PARTIAL LISTING OF OCCUPATIONS IN AGINDUSTRY FOR WHICH AGRICULTURAL WORK EXPERIENCE AND A KNOWLEDGE OF TECHNICAL AGRICULTURE ARE IMPORTANT. Norman K. Hoover, Department of Agricultural Education, 101 Agricultural Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802; (Revised) 1964; free. Agricultural occupations listed under eight occupational families.

PUBLICATIONS ON OCCUPATIONAL INFORMATION IN AGRICULTURE (fourth Edition). Harold Byram and James Albracht, 339 Erickson Hall, Michigan State University, East Lansing, Michigan; February, 1964; single copies free. A mimeograph listing publications dealing with Occupational Information in Agriculture. This is the fourth edition of the release bringing the list up-to-date.

TECHNICAL EDUCATION IN AND FOR RURAL AREAS, PRELIMINARY REPORT NO. 1. Lloyd J. Phipps and others, Agricultural Education Division, University of Illinois, Urbana, Illinois; June, 1964; 50¢. Basic data on technicians and other workers who need technical knowledge. 79 pp.

TECHNICAL EDUCATION IN AND FOR RURAL AREAS, WORKERS EMPLOYED AND EMPLOYMENT OPPORTUNITIES FOR WORKERS NEEDING A KNOWLEDGE OF AGRICULTURE. J. R. Warmbrod, Agricultural Education Division, University of Illinois, Urbana, Illinois; June, 1964; 30¢. Basic data on workers employed and employment opportunity for workers needing a knowledge of agriculture. 28 pp.

THE VO-AG TEACHER AND THE GUIDANCE PROGRAM. George Auxt, Director, Guidance Counseling and Testing, State Department of Education, Vocational Agriculture, Capitol Building, Room W-414, Charleston, West Virginia 25305; single copy free.

PLANT AND SOIL SCIENCE

✓ BASIC PRINCIPLES OF PLANT SCIENCE (A Reference Unit). L. P. Jacks, The Agricultural Education Department, Mississippi State University, P. O. Box 1419, State College, Mississippi; October, 1964; single free copy on request, to head teacher trainers and state supervisors of agricultural education. A reference unit for use in teaching basic principles of plant science in vocational agriculture courses.

✓ BASIC PRINCIPLES OF SOIL SCIENCE (A Reference Unit). L. P. Jacks and J. R. Hamilton, The Agricultural Education Department, Mississippi State University, P. O. Box 1419, State College, Mississippi; Spring 1965; single free copy on request, to head teacher trainers and state supervisors of agricultural education. A reference unit for use in teaching basic principles of soil science in vocational agriculture courses.

COLLECTING AND PREPARING SOIL SAMPLES FOR TESTING, Slidefilm No. 703-64. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February, 1964; 80¢ postpaid. This black and white, single frame slidefilm of 34 frames lists the equipment needed for taking soil samples, explains how you should take samples and prepare them for testing.

CONTROLLING INSECTS OF VEGETABLE CROPS (VAS 4047). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 30¢ postpaid (Write for quantity prices). This is a 20-page subject-matter unit that gives the description, life cycle, and possible damage caused by insects that attack some of our vegetables. In addition, it includes possible chemical and cultural control.

CORN PRODUCTION. J. R. Warmbrod, Agricultural Education Division, University of Illinois, Urbana, Illinois; September, 1964; 30¢. A source unit for adult education in Vocational Agriculture. 24 pp.

CORN PRODUCTION, AS PART OF YOUR FARMING PROGRAM (Scrambled Book No. 401). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; March, 1964; 22¢ postpaid (Write for quantity prices). The text of this 50-page scrambled book was based partially on VAS Unit 4039, but programmed as a "teaching machine." A few of the main headings are: Selecting a hybrid, Preparing the seedbed, Rate of planting, Applying pre-emergence herbicides, Depth of planting.

DEVELOPING THE LAND-USE PLAN AND THE FIELD LAYOUT (VAS 2005a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 12¢ postpaid (Write for quantity prices). This 8-page subject-matter unit gives illustrations of fitting together information about soils, conservation practices, and field arrangement into a practical crop and field plan. Maps are included for soil types, present field arrangement, final field arrangement, and a transition year.

FERTILIZERS. J. R. Warmbrod, Agricultural Education Division, University of Illinois, Urbana, Illinois; March, 1963; 30¢. Source Materials for teaching young farmer and adult farmer courses. 13 pp.

HARVESTING, HOUSING, CURING, STRIPPING, AND MARKETING BURLEY TOBACCO (HS 15). Staff, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963.

IDENTIFICATION OF WEEDS. Raymond M. Clark, Agricultural Education, and Boyd Churchill, Crop Science; Raymond M. Clark, Michigan Association of Teachers of Vocational Agriculture, 340 Erickson Hall, Michigan State University, East Lansing, Michigan; August, 1964; $40.00 - single slides 1-10 @ 50¢; 10 or more @ 35¢. A set of 132 slides of 65 species of weeds. For the most part a slide of the weed in an early stage and more nearly mature, (in bloom or just before, or just after bloom) is included. In a few cases only one slide is included for a species. In other cases a third close-up of an identifying characteristic is included.

IDENTIFICATION OF WEEDS, Slidefilm 791. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; $2.39 postpaid. This is a colored, single frame slidefilm of 40 frames. It shows 33 weeds which are common problems in our growing crops.

IMPROVING LAND USE TO INCREASE FARM INCOME (AF 3). William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1962; $1.00, single copy available free to state staffs. A 106-page course to use in adult farmer classes. The fourteen lessons should be adaptable for use in many areas. This course contains a lot of subject matter in the areas of crop selection, soils, and land use.

SLIDES AND SYLLABUS TO ACCOMPANY AF 3 (IMPROVING LAND USE). William R. Bingham, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963; $14.40. These 96 slides are designed especially for use with the adult farmer course and are coded and marked by lessons. Includes graphs, tables, field sciences, and illustrations. Some series of slides are given, comparing different crops at specific dates through a two year period. Slides are coded and marked according to the lesson they accompany.

AN INTRODUCTION TO THE PRUNING OF FRUIT TREES. William A. Luce and Phil Jenkins, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964; single copies upon request. Principles of pruning - multigraph.

LANDSCAPING YOUR HOME, Agdex 271. Lowell Hedges, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1964; $1.00. The basic principles of landscaping are described and illustrated by means of drawings. Student exercises are provided. The exercises are adapted to both rural and suburban homes. The manual is intended for teacher use.

ORNAMENTAL HORTICULTURE. Vocational Agriculture Teachers, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964; single copies available on request. Unit course on ornamentals - multigraph.

ORNAMENTAL PLANT PRODUCTION, UNIT I, BASIC UNDERSTANDINGS REGARDING THE ORNAMENTAL HORTICULTURE INDUSTRY, VOLUME XLVI, NUMBER 2. Committee of teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; supply exhausted except for file copies for State Supervisors. This Unit is the first of a series on Ornamental Horticulture. It deals with some basic understandings regarding the Ornamental Horticulture Industry.

ORNAMENTAL PLANT PRODUCTION, UNIT II, PROPAGATING ORNAMENTAL PLANTS VOLUME XLVI, NUMBER 3. Committee of Teachers and staff, Department of Agricultural Education, University of Georgia, Athens, Georgia; August, 1964; supply exhausted except for file copies for State Supervisors. This Unit is a second of a series on Ornamental Horticulture and deals with the propagation of various kinds of ornamental plants.

PHYSICAL PROPERTIES OF SOILS (HS 1). Staff, Agricultural Education Department, University of Kentucky, Lexington, Kentucky; 1963; single copy free to teacher trainers and supervisors.

PLANNING FOR SOUND LAND-USE (VAS 2003a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 18¢ postpaid (Write for quantity prices). This subject matter unit contains 12 pages. The material discusses cropping systems for obtaining favorable net income while at the same time conserving the soil. Cropping system tables (for Illinois soils) are in line with SCS recommendations for an average level of soil management.

PLANNING THE FERTILITY PROGRAM (VAS 4010a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 12¢ postpaid (Write for quantity prices). This is an 8-page subject-matter unit that discusses the probable response you could expect from the use of fertilizer, based on soil tests.

PLANT NUTRITION FERTILIZATION (SU 5). O. Claude McGhee, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; June, 1964; free. Source Unit on Plant Nutrition.

PRODUCING OATS (VAS 4023a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 18¢ postpaid (Write for quantity prices). This is a 12-page subject-matter unit that discusses the characteristics to consider when selecting a variety of oats to plant. It includes recommended practices for growing and discusses three of the main diseases that attack oats.

PRODUCING OATS (Scrambled Book No. 402). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1964; 15¢ postpaid (Write for quantity prices). The text of this 22-page scrambled book was taken from VAS Unit 4023a, but programmed as a "teaching machine." A few of the main headings are: Selecting a variety; amount to sow; preparing the seedbed; when to sow; method of seeding; fertilizing; harvesting, etc.

SELECTED LISTS OF REFERENCES AND AIDS IN TEACHING LANDSCAPING, FLORICULTURE, ORNAMENTAL HORTICULTURE AND SUBURBAN GARDENING. Instructional Materials Staff, Division of Rural Education, Stone Hall, Cornell University, Ithaca, New York; January, 1964; single copy free to state staff members. A listing of textbooks, circulars, films, slides, etc. giving title, description, source, cost and comments on securing materials for each of the specialties listed in tht title.

SOIL COLOR, Slidefilm, 708. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; $2.59 postpaid. This is a colored, single frame slidefilm of 47 frames. It explains how soil color will help us determine how we should use and manage different soil types. It also considers native vegetation, drainage, amount of organic matter, and other factors that affect soil color.

THE SOIL FERTILITY PROGRAM -- ECONOMIC CONSIDERATIONS, BUILD-UP, AND REMOVALS (VAS 2010a). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November, 1964; 18¢ postpaid (Write for quantity prices). This 12-page subject-matter unit provides information on planning the total fertility program as a step in the farm planning process. Illustrations are included for the economic principles of diminishing returns and equimarginal returns. Methods are presented for finding the most economical sources of fertilizers. Fertility removals for the problem farm are discussed.

SUGGESTED LIST OF SUPERIOR PRACTICES IN CROP PRODUCTION. Leo C. Pennington and Robert V. Kerwood, Agricultural Education Department, West Virginia University, Morgantown, West Virginia 26506; July, 1964; free. Teaching aid concerning crop production.

USING THE pH METER IN TESTING SOILS FOR ACIDITY, Slidefilm 704-63. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February, 1964; 94¢ postpaid. This is a black and white, single frame slidefilm of 44 frames. It gives the steps and equipment necessary for testing soils for acidity. It also explains how you should record and interpret your results.

RECOMMENDED PRACTICES FOR FIELD CROPS. William Dannenhauer - Edited by Ralph P. Barwick, Department of Agricultural Education, School of Agriculture, University of Delaware, Newark, Delaware; Fall 1964; single copies free, one copy per request outside the State of Delaware. An aid in developing approved practices with boys having field crops as a part of their supervised farming program. Also helpful in adult programs.

SUPERVISED PRACTICE

AGRICULTURAL EXPERIENCE PLAN OUTLINE. Dr. Guy E. Timmons, Michigan State University, 338 Erickson Hall, East Lansing, Michigan; Fall 1963; single copies free. A two page mimeograph outline showing a systematic approach to the teaching of farm management as it is related to a specific enterprise.

GUIDING BOYS IN SELECTING AND PLANNING FARMING PROGRAMS. Staff of the Agricultural Education Department, University of Kentucky; 1963.

SUPERVISION AND TEACHER EDUCATION

POLICY STATEMENT OF THE DEPARTMENT OF VOCATIONAL AGRICULTURE OF THE - SCHOOL CORPORATION. AE-22, Philip R. Teske, Department of Agricultural Education, Purdue University, LaFayette, Indiana; November 1964; no charge. A sample policy statement of a vocational agriculture department in Indiana. This 16 page mimeograph is designed for use with an advisory council and the school administration to develop appropriate policy statements for a local vocational agriculture department.

A PROPOSAL FOR ORIENTATION OF NEW TEACHERS OF VOCATIONAL AGRICULTURE. Staff of the Department of Agricultural Education, A. and T. College, Greensboro, North Carolina; Spring 1964; no charge.

THE RELATIONSHIP OF CHARACTERISTICS OF PROSPECTIVE STUDENT TEACHERS AND STUDENT TEACHING EFFECTIVENESS IN AGRICULTURAL EDUCATION. G. R. Fuller, Agricultural Education Division, University of Illinois, Urbana, Illinois; November 1963; Price 50¢. Research study.

TEACHING AIDS AND MATERIALS

ATTITUDE INVENTORY FOR BEGINNING HUNTERS. Frank Anthony, Department of Agricultural Education, 101 Agricultural Education Building, The Pennsylvania State University, University Park, Pennsylvania; 1964; free. An attitude inventory of 50 items dealing with the "Ten Commandments of Safety" to be used for beginning Hunters in 7th and 8th grades.

INSTRUCTIONAL MATERIALS FOR USE IN AGRICULTURAL EDUCATION. California State Polytechnic College, El Corral Book Store, San Luis Obispo, California; current; Price $.25 to $4.50. Bulletins, manuals, sets of plans, color filmstrips on a wide variety of agricultural topics. Write for catalog.

INVENTORY FORMS FOR VO-AG DEPARTMENTS. Joseph K. Bailey, Assistant State Supervisor, State Department of Education, Vocational Agriculture, Capitol Building, Room W-414, Charleston, West Virginia; one copy free.

ON-FARM AND OFF-FARM AGRICULTURAL FACTS FOR PROGRAM PLANNING IN VOCATIONAL AGRICULTURE. R. A. Baker, Department of Vocational, Technical and Practical Arts Education, Auburn University, Auburn, Alabama; 1964; free to Teacher Educators and Supervisors. Mimeograph provides tables for recording agricultural facts. Tables arranged and organized to facilitate collection of data from census reports and research studies.

SELECTED LISTS OF REFERENCES AND AIDS IN TEACHING: LANDSCAPING, FLORICULTURE, ORNAMENTAL HORTICULTURE AND SUBURBAN GARDENING. Donald Burgett, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; January 1964; single copy free. Lists the bulletins and circulars; textbooks; films, filmstrips and slides; commercial materials and other suitable references in the areas of landscaping, floriculture, ornamental horticulture and suburban gardening.

TEACHING AIDS - IDEA EXCHANGE. Walen, Wood, Teeter, Kumpula, Kirkbride and Blauert, State Board for Vocational Education, Agricultural Division, P. O. Box 250, Olympia, Washington; 1964. A folding sheep trimming stand, portable classroom and shop podium, shop protective coat hanger, grading tests on the spirit duplicator, wall chart hanger, drilling gadget holder. Description and line drawings. Free.

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A DESCRIPTION AND SOURCE LISTING OF PROFESSIONAL INFORMATION IN AGRICULTURAL EDUCATION

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Industrial Arts

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A DESCRIPTION AND SOURCE LISTING
OF
PROFESSIONAL INFORMATION
IN
AGRICULTURAL EDUCATION
1965-66

Prepared by

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ADULT AND POST HIGH SCHOOL EDUCATION

ADULT LEADERSHIP SERIES NO. 4. J. D. McComas, Department of Agricultural and Extension Education, New Mexico State University, University Park, New Mexico 88070; May, 1965; $1.00/bound copy. Identifying and developing leadership at the community level, 148 pages.

AGRICULTURAL SUPPLY CURRICULUM (POST-SECONDARY) TECHNICAL EDUCATION IN AND FOR RURAL AREAS - PRELIMINARY REPORT. Gerald R. Fuller, Agricultural Education Division, 357 Education Building, University of Illinois, Urbana, Illinois 61803; May, 1965; $.50 (A limited quantity available on single copy basis mimeographed). This publication outlines an educational program designed to provide up to two years of full-time study beyond high school, plus on-the-job experience in the agricultural supply phase of industry.

LEADERSHIP EDUCATION - INDIVIDUAL AND GROUP. Students and Staff in Agricultural Education, Agricultural Education Department, Montana State University, Bozeman, Montana; January, 1966; $1.75. There are 20 chapters on group leadership - also 12 chapters on individual leadership. Included is a bibliography, approximately 120 pages.

NEW CHALLENGES IN DEVELOPING POST HIGH SCHOOL PROGRAMS IN AGRICULTURAL OCCUPATIONS. J. D. McComas, Norman K. Hoover, *et. al.*, Department of Agricultural & Extension Education, New Mexico State University, University Park, New Mexico 88070; Resident Instruction Series No. 5, May, 1965; $1.00 per bound copy. A workshop report on agricultural occupations in which nine states participated, 107 pages.

TEACHING UNITS IN FARM MANAGEMENT FOR YOUNG ADULT VOCATIONAL AGRICULTURE STUDENTS. P. Teske, Education Building, Purdue University; August 1965; Free - 1 copy per request. Series of ten lesson units for young adult students covering approximately 70 hours of classroom and follow-up instruction.

TEACHING UNITS IN LEGAL ASPECTS OF FARM BUSINESS MANAGEMENT AND SERVICE PRODUCTION FOR ADULT FARMER VOCATIONAL AGRICULTURE STUDENTS. P. Teske, Education Building, Purdue University, Lafayette, Indiana; August 1965; Free - 1 copy per request. A set of nine lesson units on legal aspects of Farm Business Management, three units on Service Production and one unit on Tomato Production for use with adult farm students.

AGRICULTURAL MECHANICS

ADJUSTABLE STAND, PLAN NO. 101. Agricultural Education Staff, Agricultural Education Department, 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction - blueprint (one page) - with line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

AGRICULTURAL MECHANICS AND AUTOMATION CLASS RECORD. David R. McClay and Richard A. Rawson, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; June 1965; $.25. Wall chart for recording shop training given students.

√AIR COMPRESSORS (VAS 3018). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December, 1965; $.26 postpaid. (write for quantity prices). This 20-page subject-matter unit discusses the selection, installation, and servicing of air compressors. Practical problems are listed to stimulate thought on problems connected with matching compressors with jobs. Check lists on installation, care and maintenance are also included.

BOOKCASE, PLAN NO. 500. Agricultural Education Staff, Agricultural Education Department, 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction blueprint (one page) with line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

COMBINES AND COMBINING, "REVISED" AGDEX 745. Harlan Ridenour, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $.75. The publication is designed as a student manual. It is designed to involve the student in the study of combines. There are four sections as follows: I. Value of doing a good job of combining; II. The basic design of the combine; III. Operation of the combine; and IV. Economics of owning a combine. 80 pages.

COMBINES AND COMBINING, AGDEX 745. Harlan Ridenour, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $4.25. A series of 30 color slides with an accompanying script that illustrates the various parts of the combine. To accompany the manual "Combines and Combining."

PLANNING AND PREPARING FOR CONCRETE MASONRY CONSTRUCTION, 433, LAYING CONCRETE MASONRY UNITS, 434, SPECIAL CONCRETE MASONRY PROBLEMS, 435. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $3.25 for set of 3 films, postpaid. All 3 films in this series are single-frame, black and white. Film 433 shows some of the advantages of concrete masonry construction and illustrates how the characteristics of the units are related to building plans and finishes. Film 434 presents a step-by-step procedure of the techniques used in laying concrete masonry units. Film 435 shows the use of control joints and how to construct them. It shows basement walls and how to provide proper drainage.

DEFINITION OF ELECTRICAL TERMS. Professor Von H. Jarrett, Agricultural Education Department - Utah State University; 1965; two-page mimeograph.

DIAGRAMMING ELECTRICAL WIRING CIRCUITS, SLIDEFILM 401-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; April 1965; $1.15 postpaid. This is a black and white, single-frame slidefilm of 54 frames. The slidefilm illustrates the parts of an electrical circuit. A set of symbols is suggested and these are shown along with pictorial illustrations of a number of wiring circuits.

DRAWBAR PIN, PLAN NO. 800. Agricultural Education Staff, Agricultural Education Dept., 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction blueprint (one page) with line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

EFFICIENT MACHINE HARVESTING AGDEX 111/50. D. M. Byg, Agricultural Engineering, Ohio State University, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $4.50. A series of 26 color slides that show, in graphic form, the results of corn harvesting loss surveys conducted in 1964 by agricultural engineers. To accompany the manual "Combines and Combining."

FARM ELECTRIFICATION FOR VOCATIONAL AGRICULTURE III and IV. N. J. Department of Education and N. J. Farm Electrification Council, Department of Vocational-Technical Education, Graduate School of Education, Rutgers - The State University, 10 Seminary Place, New Brunswick, New Jersey; Fall, 1965; Single Copies Free. This teaching guide, the third of a series, deals with the agricultural uses of electrical energy in the production of heat, light, and power. Materials are written for third and fourth year secondary school students.

FARM MACHINERY LAB MANUAL. Professor Von H. Jarrett, Agricultural Education Department - Utah State University; 1965; This manual is designed particularly for the course at Utah State University. It is a guide to Vocational Agriculture teachers who teach a post-high school program in the local schools.

FARM POWER LAB MANUAL. Professor Von H. Jarrett, Agricultural Education Department - Utah State University; 1965; This laboratory manual is intended to furnish outlines of laboratory procedures and information relative to overhauling of tractors.

SKILL TEXT, HYDRAULIC SYSTEMS FOR THE FARM - WORKBOOK FOR THE STUDENT. Robert Rannells and Forrest Bear, Agricultural Engineering Department, University of Minnesota, St. Paul, Minnesota; December 28, 1965; The Skill Text is the workbook for the student and is correlated with the teachers' resource unit.

HYDRAULIC SYSTEMS FOR THE FARM - RESOURCE UNIT FOR THE TEACHER. Robert Rannells and Forrest Bear, Agricultural Engineering Department, University of Minnesota, St. Paul, Minnesota; December 28, 1965; The teachers guide for teaching a hydraulic unit to high school students or beginning farmers. The topic, demonstrations, publications, films and subject matter is included for each lesson.

INTERNAL COMBUSTION ENGINES. Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; March 1965; Free - Single copy for supervisors and teacher-trainers. Teaching unit, 11 pages.

INTRODUCTION TO ARC WELDING, MPT BULLETIN #1. Teacher Training Department, Manpower Development and Training Division, State Board for Vocational Education, Department of Agricultural Education, Oklahoma State University, Stillwater, Oklahoma; March 15, 1965; $.75. Teaching job sheets and illustrations. Should prove valuable as a teaching aid in Agricultural Mechanics, 84 pages.

MAINTAINING THE HOME LIGHTING AND WIRING SYSTEM. Southern Association for Agricultural Engineering and Vocational Agriculture, Agricultural Engineering Building, University of Georgia, Athens, Georgia; (Revised 1965) A do-it-yourself type of publication showing the correct and safe procedures for replacing electrical items that are most likely to wear out or give trouble. Contains: 64 pages, 142 illustrations, three colors. Size: 8 1/2 x 11. $1.50 postpaid.

METALS. Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; October 1965 (revised); Free - single copy for supervisors and teacher trainers. Basic unit - 40 pages.

NAIL BOX, PLAN NO. 100. Agricultural Education Staff, Agricultural Education Department, 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction blueprint (one page) with line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

OXY-ACETYLENE WELDING VISUALS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; April 1965; $1.17 postpaid. This is a series of 73 instructional illustrations on oxy-acetylene welding. They are for use with an opaque projector, for making transparencies for overhead projection or for direct viewing. This set of visuals is contained in a manila pocket folder for filing.

PIPE GATE, PLAN NO. 400. Agricultural Education Staff, Department of Agricultural Education, 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction blueprint (one page) line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

✓ PRACTICAL EXERCISES FOR DEVELOPING MECHANICAL SKILLS. Gienger, Addison and Gentry, Department of Agricultural & Extension Education, University of Maryland, College Park, Maryland 20742; June 1965; Single copies free.

PRACTICE WOOD BLOCK, PLAN NO. 850. Agricultural Education Staff, Agricultural Education Department, 122 Waters Hall, University of Missouri, Columbia, Missouri; 1965; $1.00 per pad of 25. Project construction blueprint (one page) with line drawings, construction procedure and bill of material. Printed so each student may have a personal copy.

SELECTED TEACHING PLANS IN FARM ELECTRIFICATION. Charles O. Smith and Professor Joe P. Bail, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; February 1965; Single copy free. A group of eight teaching plans including some charts and work-sheets on farm electrification. Each plan contains the teacher's purposes, an analysis of the job and suggested teaching procedures.

SELECTION, OPERATION, AND CARE OF ELECTRIC MOTORS. Professor Von H. Jarrett, Agricultural Education Department, Utah State University; 1965; 8 Page mimeograph.

SELECTING AND STORING TRACTOR FUELS AND LUBRICANTS. G. E. Henderson and James H. Turner, Southern Association for Agriculture Engineering and Vocational Agriculture; 1964; $1.20. Discusses fuel ratings, compression ratios, fuel grades, contaminants, fuel storage, storage losses, safety, cost of storage, maintenance.

✓ COURSE OUTLINE FOR SMALL ENGINES. Professor Von H. Jarrett, Agricultural Education Department, Utah State University; 1964-65; This outline is designed primarily for overhaul and tune-up of the Briggs & Stratton engine.

✓ SMALL ENGINES - REPAIR AND OVERHAUL (VAS 3019). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.26 postpaid. (write for quantity prices). This 20 page subject matter unit discusses the tools and equipment needed and the steps in repairing small engines. Considerable emphasis is placed on how to measure wear, and decide what parts should be replaced.

TRACTOR MAINTENANCE - PRINCIPLES AND PROCEDURES. G. E. Henderson and James H. Turner, Southern Association for Agricultural Engineering and Vocational Agriculture; 1964; $3.25. Deals with the practical maintenance jobs that keep a tractor in top running condition--those that both dealers and manufacturers expect a farmer to do. Operating principles are discussed and illustrated along with the step-by-step procedures for doing various jobs.

TRANSMISSION OF ELECTRICAL ENERGY, CONTROLS, WIRES, AND WIRING. Professor Von H. Jarrett, Agricultural Education Department, Utah State University. 1965. Six page mimeograph.

USING THE LEVEL IN FARM SURVEYING, SLIDEFILM 438. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February 1964; $1.04 postpaid. This is a black and white, single-frame slidefilm of 53 frames. The slidefilm describes the proper procedures to follow when using the hand level, tripod level, and target rod. Instructions are given on setting up, focusing and caring for the tripod level. Suggestions are given on how to read the target rod. A suggested set of hand signals is given.

ANIMAL SCIENCE

A TEST ON ANIMAL SCIENCE FOR FIRST-YEAR STUDENTS IN HIGH SCHOOL AGRICULTURE, SERVICE BULLETIN NUMBER TWO. Raleigh A. Jobes III, Department of Agricultural Education, University of Arizona, Tucson, Arizona; August 1964; Single copy free to State staff members only. A standardized test prepared to evaluate understanding of basic principles in animal science.

AN INTRODUCTION TO ANIMAL DISEASES, SERVICE BULLETIN NUMBER TWO. Agricultural Education Department Staff, Department of Agricultural Education, University of Arizona, Tucson, Arizona; April 1965; Single copy free to State staff members. A source unit prepared for use by high school students designed to help them understand the basic principles and terminology in animal diseases. It is the first of a series of three source units for teaching the entire area of animal sanitation and disease control.

BREEDING FARM ANIMALS HS-34. Staff, Department of Agricultural Education, University of Kentucky, Lexington, Kentucky; Revised 1965; Free - one copy to teacher educators, supervisors and teachers.

DAIRY CATTLE STERILITY AGDEX 4101 30. Dr. Harry Barr, Department of Dairy Science, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $6.50. A series of 44 color slides collected from the Dairy Science Department of the Ohio State and Michigan State Universities. To accompany the Hoard's Dairyman Booklet, "Dairy Cattle Sterility." The slides are organized according to the lesson plan unit developed by Dr. Raymond Clark.

FEED ADDITIVES (VAS 1038). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.12 postpaid. (Write for quantity prices). This 8-page subject matter unit discusses such feed additives as antibiotics, arsenicals, hormones, tranquilizers, enzymes, live yeast cultures, dried rumen cultures and copper compounds.

IDENTIFICATION OF BEEF CUTS, SLIDEFILM 183-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $2.67 postpaid; This is a single frame slidefilm of 52 frames in color. It illustrates the beef wholesale and retail cuts used in the national FFA meat judging contest and briefly explains some identifying characteristics of each.

PRACTICE SET FOR IDENTIFICATION OF BEEF CUTS, SLIDEFILM 183-65 SUPP. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1966; $2.29 postpaid; This is a single-frame slidefilm of 41 frames in color showing an unnamed set of pictures shown in Slidefilm No. 183-65. This film is intended to be used after Slidefilm No. 183-65 has been shown and discussed, as an aid in teaching the identification of beef cuts.

IDENTIFICATION OF KINDS OF MEAT, SLIDEFILM 181-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $1.94 postpaid; This is a single frame slidefilm of 24 frames in color. It points out the differences between beef, pork, lamb, and veal so a person can identify a piece of meat by species.

IDENTIFICATION OF LAMB CUTS, SLIDEFILM 185-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $2.13 postpaid; This is a single-frame slidefilm of 30 frames in color. It illustrates the wholesale and retail cuts of lamb used in the national FFA meat judging contest and briefly explains the identifying characteristics of each.

PRACTICE SET FOR IDENTIFICATION OF LAMB CUTS AND VARIETY CUTS, SLIDEFILM 185-65 SUPP. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January, 1966; $2.08 postpaid. This is a single-frame slidefilm of 32 frames in color showing an unnamed set of lamb and variety cuts shown in Slidefilms #181-65 and #185-65. This film is intended to be used after slidefilms 181-65 and 185-65 have been shown and discussed, as an aid in teaching the identification of lamb and variety cuts.

IDENTIFICATION OF PORK CUTS, SLIDEFILM 182-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $2.57 postpaid. This is a single-frame slidefilm of 46 frames in color. It illustrates the pork wholesale and retail cuts used in the national FFA meat judging contest and briefly explains the muscle and bone structure of each.

PRACTICE SET FOR IDENTIFICATION OF PORK CUTS, SLIDEFILM 182-65 SUPP. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois. January 1966; $2.19 postpaid. This is a single-frame slidefilm of 37 frames in color. It is a set of pictures of pork cuts, shown in Slidefilm 182-65, for use in practice work in teaching students to identify pork cuts. This is a supplement to Slidefilm 182-65 and would have most value to a class after #182-65 had been shown and discussed.

JUDGING AND GRADING MEAT. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1966; $.32 postpaid. This 32-page booklet is a revision of a booklet by the same title. The list of meat cuts was changed to conform with that of the national judging contest and the beef grading section was brought up to date.

JUDGING MILK, SEDIMENT DISCS, AND MILKER UNIT HEADS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.13 postpaid. This 8-page booklet explains how to prepare milk samples for flavor and odor, how to taste milk for best results, and how to mark the cards and score them. Cards used in the Illinois and national contests are shown in the back. This is a revision of a booklet by the same title.

MAINTAINING ANIMAL HEALTH. Robert V. Kerwood, Agricultural Education Department, 2054 Agr. Sci. Building, West Virginia University, Morgantown, West Virginia; June 1964; One copy free. This publication includes nine chapters that categorize the diseases according to the animals affected; namely, cattle, swine, sheep, poultry, and those that affect several species of animals. Internal and external parasites are also given special consideration.

PRODUCING HIGH QUALITY HAMS AND BACON IN WEST VIRGINIA. Allen Colebank, Agricultural Education Department, 2054 Ag. Sci. Building, West Virginia University, Morgantown, West Virginia; 1965; One Copy Free. This publication treats the subject as a set of progressive steps that begin with the selection of parent stock and continues through care and management of breeding stock to selection, growing out, slaughtering, cutting up of carcass, curing hams and bacons, smoking hams and bacons, and handling and storing hams and bacon for home use.

√ SYSTEMS OF SWINE BREEDING (VAS 1039). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.12 postpaid. (write for quantity prices) This 8-page subject matter unit discusses the process of reproduction, causes of variations in offspring, the different systems of breeding, and the effects of crossbreeding swine.

TESTING MILK FOR BUTTERFAT, SLIDEFILM 206-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1965; $1.06 postpaid. This is a black and white, single frame slidefilm of 47 frames. It illustrates the steps involved in making the Babcock test for milk.

TRAINING TEAMS IN JUDGING DAIRY CATTLE, MONOGRAPH 64. Denver B. Hutson, Department of Vocational Education, University of Arkansas, Fayetteville, Arkansas 72701; January 1964; single copies free to supervisors and teacher trainers. General information pertaining to training judging teams for the FFA Dairy Cattle Judging Contest, including rules and regulations of the contest and a discussion of a number of items relating to dairy cattle judging - the score card, evaluation of pedigrees, and preparing teams, and publications on judging of various breed associations. 85 pages.

VETERINARY SCIENCE CLASS (ADULT EDUCATION). Dr. A. E. McChesney, Bozeman Veterinary Hospital, Agricultural Education Department, Montana State University, Bozeman, Montana; 1965 Revised; $1.50. 8 1/2" x 11" multigraph. Nine major units, double spaced for additional class notes. 62 pages.

CURRICULUM DEVELOPMENT

A COURSE OF STUDY FOR AGRICULTURAL MECHANIZATION 3 AND 4. Julian M. Carter, and Harold L. Noakes, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; single copy free to State staff members. A guide designed to aid the teacher in developing a course of study aimed at providing the training needed by entry workers as agricultural machinery and equipment and structures mechanics. Major headings include: (1) Shop Management, (2) Job Opportunities and Training Needs, (3) Developing Advanced Skills in Agricultural Mechanization, (4) Tractors and Engines, (5) Soil Preparation Equipment, (6) Planting, Fertilizing and Seeding Equipment, (7) Cultivating Equipment, (8) Harvesting Equipment, (9) Materials Handling Equipment, (10) Agricultural Structures, and (11) Soil and Water Management Equipment.

A COURSE OF STUDY FOR CONSERVATION 3 AND 4. Julian M. Carter, William E. Drake, Harold L. Noakes and Willard E. Ossont, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; single copy free to State staff members. A guide designed to aid the teacher in developing a course of study for Conservation 3 and 4 adapted to the vocational conservation training needs of the local area. Major headings include: (1) Forestry, (2) Wildlife Management, (3) Outdoor Recreation Resources Management, (4) Soil and Water Management and (5) Conservation Mechanics.

A COURSE OF STUDY FOR FARM PRODUCTION AND MANAGEMENT FOR DAIRY FARMING AREAS WITH SUPPLEMENTS FOR ADOPTING TO FRUIT AND VEGETABLE PRODUCTION AREAS. Ernest F. Nohle, Julian M. Carter, Harold R. Cushman, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; single copy free to State staff members. A suggested list of the constants which should be used in programs of farm production and management within the State. Major headings include: (1) Supervised Farming Programs, (2) Farm Management and Agricultural Economics, (3) Dairy, (4) Forage Crops, (5) Corn, (6) Small Grains, (7) Land Use and Conservation, (8) Farm Mechanics and (9) Leadership Training.

A FOUR YEAR INTEGRATED PROGRAM FOR FARM AND NON-FARM STUDENTS IN VOCATIONAL AGRICULTURE. R. W. Canada, Department of Vocational Education, Agriculture Section, Colorado State University, Fort Collins, Colorado; July 1965; No charge - limited quantity. A plan for conducting and scheduling classes in vocational agriculture for farm and non-farm students in one teacher departments.

A GUIDE FOR DEVELOPING THE INSTRUCTIONAL PROGRAM IN FARM MANAGEMENT. Committee - Utech, Benton, Fuller, Herbst, and James, Board of Vocational Education and Rehabilitation, 405 Centennial Building, Springfield, Illinois 62706; September 1965; Single copies available free. This bulletin has been prepared to give vocational agriculture teachers assistance in the revision or the development of an instructional program designed to provide the competencies needed for successful farm management.

AGRICULTURE I - A CURRICULUM UNIT OUTLINE FOR VOCATIONAL AGRICULTURE. A. K. Jensen, Agricultural Education Department, Clemson University, Clemson, South Carolina; 1964; one copy free while the supply lasts. An outline of a course of study for vocational agriculture 1 in South Carolina. The outline includes lists of reference materials that may be used in teaching the course.

AGRICULTURE 1 - INTRODUCTION TO AGRICULTURE AND AGRICULTURE 2 - APPLIED SCIENCE AND MECHANICS IN AGRICULTURE (COURSES OF STUDY FOR). Harold L. Noakes and Charles W. Hill, Bureau of Agriculture Education, State Education Department, Albany, New York 12224; June 1965; Single copy free to State staff members. Suggestions for developing courses of study for the first two years of agriculture which are to provide a basis and preparation for specialized courses in agriculture in the third and fourth years. Major headings include: (1) Orientation to Vocational Agriculture, (2) The Importance of Agriculture, (3) The Types of Agriculture, (4) Applied Science in Agriculture, (5) Applied Mechanics in Agriculture, (6) Occupations in Agriculture, (7) Agricultural Business Management and (8) Personality Development.

AGRICULTURE II - A CURRICULUM UNIT OUTLINE FOR VOCATIONAL AGRICULTURE. A. K. Jensen, Agricultural Education Department, Clemson University, Clemson, South Carolina; 1964; one copy free while the supply lasts. An outline for the second year of a four-year vocational agriculture program in South Carolina. Student and teacher references and audio-visual materials are also listed.

ARC WELDING. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; September 1964; one copy free while the supply lasts. Suggested Course Outline for adults.

ELECTRICITY ON THE FARM. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; November 1964; one copy free while the supply lasts. Suggested course outline for teachers for adult short course.

FARM CARPENTRY. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; January 1965; one copy free while the supply lasts. Policies, procedures, and course outline for teachers. Prepared for teaching farm carpentry to adult groups.

MEAT PROCESSING. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; December 1964; one copy free while the supply lasts. Policies, procedures, and course outline for teachers. Prepared for adult groups.

OPERATION, CARE AND REPAIR OF FARM TRACTORS. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; October 1964; one copy free while the supply lasts. Policies, procedures, course outline and aids for teachers. Prepared for teachers offering tractor courses for adults.

✓ ORNAMENTAL HORTICULTURE. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; October 1964; one copy free while the supply lasts. Policies, procedures, and course outline for teachers. Prepared for teachers offering ornamental horticulture for adults.

✓ORNAMENTAL HORTICULTURE. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; May 1965; one copy free while the supply lasts. Purposes, competencies, course outline and teaching aids. Prepared for a two-year high school course.

SMALL GAS ENGINES - MAINTENANCE AND REPAIR. F. E. Kirkley, Agricultural Education Department, Clemson University, Clemson, South Carolina; October 1964; one copy free while the supply lasts. Course outline for teachers of adult courses.

SOURCE UNIT - AGRICULTURAL COOPERATIVES. A TEACHERS GUIDE TO INSTRUCTIONAL PLANNING. Paul E. Hemp and Norman D. Ehresman, Agricultural Education Division, 357 Education Building, University of Illinois, Urbana, Illinois; August 1965; $.50. This publication includes 64 pages of suggestions and ideas which should help teachers teach their students about agricultural cooperatives. Teaching outlines, sample test items, a glossary of cooperative items, and suggested references and aids are included in this source unit.

THE STATUS OF SPECIALIZED COURSES IN VOCATIONAL AGRICULTURE. RESEARCH SERIES BULLETIN, NUMBER TWO. Phillip R. Zurbick, Department of Agricultural Education, University of Arizona, Tucson, Arizona; June 1965; single copy free to State staff members in agricultural education. A report of a study conducted in 1964 to find out what specialized courses are being taught in high school vocational agriculture programs. A total of 29 states indicated that they were planning to offer, or were offering, specialized courses in the areas of agricultural mechanics, horticulture, ornamental horticulture and agricultural business.

✓SUGGESTIONS FOR DEVELOPING A COURSE OF STUDY IN ORNAMENTAL HORTICULTURE. Frank J. Wolff, J. O. Sanders and Fred K. T. Tom, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; Single copy free to State staff members. Suggestions designed to assist teachers and administrators in planning ornamental horticulture programs varying in length from two to four years. Major headings in the first two years include (1) Orientation and Guidance, (2) The Nature and Importance of the Ornamental Horticulture Industries, (3) Applied Plant Science, (4) Applied Soil Science, (5) Applied Pest Control Science, (6) Applied Horticultural Mechanics, (7) Horticultural Business Management and Marketing, (8) Personality and Leadership Development. Major headings in the third and fourth years include: (1) Horticultural Business Management and Marketing, (2) Horticultural Mechanics, (3) Landscape Planning, (4) Landscape Construction and Maintenance (5) Greenhouse Production and Management, (6) Floral Design and Flower Arrangement, (7) Nursery Production and Management and (8) Turf Growing and Maintenance. Provisions are made for adapting the latter two years to the specific needs of the group to be served and the area in which the program is located.

SUGGESTIONS FOR DEVELOPING COURSES OF STUDY IN AGRICULTURAL BUSINESS. Frank J. Wolf, Joe P. Bail and Steve M. Smith, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; Single copy free to State staff members. Suggestions for developing the first course of a two-year specialized sequence in Agricultural Business. The course is designed to be offered either as a two-period specialized one or as a single period course which compliments other specialized courses in agriculture taken concurrently. Major headings include: (1) Orientation and Guidance, (2) The Organization of Agricultural Businesses, (3) Mathematics in Agricultural Business (4) Providing Insurance for Agricultural Business, (5) Legal and Ethical Aspects, (6) Record Keeping, (7) Understanding and Paying Taxes, (8) Finance and Credit, (9) Personnel Practices, (10) Marketing Agricultural Products and (11) Personal Development and Growth.

✓TEACHING ELECTRICITY IN THE HIGH SCHOOL. R. A. Wall, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; August 1965; Single copy free to State supervisors and teacher trainers. Teaching Unit, 22 pages.

TECHNICAL EDUCATION NEEDS OF PERSONS ENGAGED IN AGRICULTURAL OCCUPATIONS, TEACHER EDUCATION RESEARCH SERIES, VOLUME VI, NUMBER 1, 1965. Norman K. Hoover, David R. McClay, and Glenn Z. Stevens, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; January 1965; Single copy free. A preliminary report of the Pennsylvania study of agricultural occupations. Includes survey data for 17 of 69 Pennsylvania Counties.

VOCATIONAL EDUCATION IN AGRICULTURE IN OKLAHOMA, AG. EDUC. BULLETIN #5. Staff, Department of Agricultural Education, Oklahoma State University, Stillwater, Okalhoma; July 15, 1964; $.75. A manual for use in program planning for local programs of Vocational Agriculture. Makes extensive use of analyses of problem areas in (1) Social Science, (2) Biological and Physical Science, and (3) Agricultural Mechanics. Educational objectives and significant problems are recognized and identified in terms of appropriate content and time allocation.

FACILITIES FOR DEPARTMENTS

PORTABLE ENGINE STAND. Fred J. Walmsley - Graduate Student, University of Idaho, Moscow, Idaho - Department of Agricultural Education; 1964; Free while supply lasts.

SUGGESTED FACILITY FOR AGRICULTURAL COURSES IN AREA VOCATIONAL-TECHNICAL SCHOOLS. David R. McClay and Frank Anthony, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; November 1965; Free single copy on request. Perspective and floor plan for an agricultural wing to an area vocational-technical school.

WELDING EXHAUST SYSTEM FOR AG. SHOPS. Carter V. Luther - Graduate Student, University of Idaho, Department of Agricultural Education, Moscow, Idaho; 1965; Free while supply lasts.

FARM BUSINESS, MANAGEMENT, MARKETING

THE APPLICATION OF SELECTED BUSINESS PRINCIPLES TO FARMING PROGRAM RECORD KEEPING (A RESOURCE UNIT FOR TEACHERS AND STUDENTS) TEACHER EDUCATION SERIES, VOLUME VI, NUMBER 1. Robert E. Steffy, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; 1965; $1.00 (available in quantity). This unit is designed to help high school students properly keep farming program records. Aids for the teacher and for the student are combined.

ESTIMATING FARM MACHINERY COSTS. J. D. Oliver and E. S. Smith, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; June 1964; Free single copy for supervisors and teacher trainers. Printed bulletin, 11 pages.

FARM AND RANCH BUSINESS ANALYSIS. Leo L. Knuti, H. E. Rodeberg and Graduate Students, Agricultural Education Department, Montana State University, Bozeman, Montana; 1965; $1.75. Three-year course of study in farm business analysis for adults. Patterned after the program in Minnesota. 8 1/2" x 11" multigraph, 108 pages.

A FARM RECORD PREPARED FOR USE BY DEPARTMENTS OF VOCATIONAL AGRICULTURE IN TEACHING, RECORD KEEPING AND ANALYSIS. Department of Agricultural Economics, Doyle Beyl, State Board of Vocational, Technical, and Adult Education, 1 West Wilson Street, Madison, Wisconsin; April 1965; Free. Contains sample entries for a farm account book, end of year farm business analysis and an instructor's key.

√ FITTING MACHINERY AND EQUIPMENT TO THE FARM (VAS 2039). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.26 postpaid. (write for quantity prices). This 20-page subject matter unit discusses the importance of machinery and equipment costs, fixed and variable costs, keeping costs at a reasonable level, using partial budgets in making decisions about machinery, and planning the machinery and equipment for a problem farm.

ILLINOIS CROP-SHARE CASH FARM LEASE, SLIDEFILM 340-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February 1965; $1.20 postpaid. This is a black and white, single-frame slidefilm of 65 frames. It illustrates the parts of the Illinois Crop-Share Cash Farm Lease. The various parts have been filled in as they might appear on a sample Illinois farm. As the "filled in" parts are shown, further discussion follows. The five legal essentials are noted as they occur throughout the lease. Suggestions are made that should help to provide for a fair means of dividing income and expenses between the landlord and tenant.

INCOME TAX PROBLEMS 1 AND 2. R. Vendon; Doyle Beyl, State Board of Vocational, Technical and Adult Education, 1 West Wilson Street, Madison, Wisconsin; Revised November 1965; Free. Two sample problems facilitate the exploring of the various provisions when filing farm income taxes.

✓ INSURANCE IN AGRICULTURE. Robert E. Norton, et. al. Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; January 1966; Single copy free; A resource unit on insurance in agriculture prepared for use by teachers of agriculture in teaching all-day and young farmer groups. Major section headings are Property Insurance, Motor Vehicle Insurance, Liability Insurance, Life Insurance, and Health Insurance.

INVENTORY YOUR RESOURCES, SLIDEFILM 370-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; October 1965; $1.03 postpaid; This is a black and white, single frame slidefilm of 51 frames. It includes discussion and illustrations of the making of inventories for the four resources -- land, labor, capital, and management -- for use in a new farm plan. An actual farm situation is the basis for these illustrations. Among the items included are soil maps, field maps, and lists of buildings, machinery, and equipment.

PLAN THE LAND-USE PROGRAM AND ESTIMATE CROP PRODUCTION, SLIDEFILM 371-65. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; November 1965; $.88 postpaid. This is a black and white, single frame slidefilm of 39 frames. It carries a problem farm through the steps of planning the cropping system and estimating the value of crop production. Net income considerations are made as well as those concerning soil conservation.

A SOURCE UNIT ON FARM MACHINERY MANAGEMENT. E. E. Julson, Vocational Education Department, Agriculture Section, Colorado State University, Fort Collins, Colorado; June 1965; No charge - limited quantity. A source unit dealing with teaching procedures and extensive bibliography dealing with materials useful in decision making in farm machinery management.

FUTURE FARMERS OF AMERICA

INCIDENTAL MOTIONS - PARLIAMENTARY PROCEDURE #3 (SCRAMBLED BOOK NO. 503). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; January 1965; $.17 postpaid. (write for quantity prices). The text of this 34-page scrambled book was taken from A Guide to Parliamentary Practices, but was programmed as a "teaching machine." It includes the incidental motions, to rise to a question in order, appeal from the decision of the chair, suspend the rules, object to the consideration of a question, divide a question or call for consideration by parts, call for a division of the assembly, make a motion relating to nominations, and make a request growing out of pending business.

PARLIAMENTARY PROCEDURES FOR FFA CHAPTERS. Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; January 1965; Free Single copy to supervisors and teacher trainers. 30 pages.

PRIVILEGED AND UNCLASSIFIED MOTIONS - PARLIAMENTARY PROCEDURE No. 4 (SCRAMBLED BOOK No. 504). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; October 1965; $.17 postpaid. (write for quantity prices). The text of this 38 page scrambled book was taken from A Guide to Parliamentary Practices, but was programmed as a "teaching machine." It includes the privileged motions, to fix the time to adjourn, adjourn, take a recess, raise a question of privilege, and call for orders of the day and unclassified motions to take from the table, reconsider, rescind, and ratify.

GUIDANCE AND OCCUPATIONAL OPPORTUNITIES

BIBLIOGRAPHY OF GUIDANCE MATERIAL ON AGRICULTURAL OCCUPATIONS. R. C. Butler and Leo C. Pennington, Agricultural Education Department, 2054 Agr. Sci. Bldg., West Virginia University, Morgantown, West Virginia; June 1965; 1 copy free. This publication contains a comprehensive listing of available resource material for many areas of work that require agricultural competencies. The material is intended to stimulate and bolster the efforts of guidance in the field of agriculture.

CAREERS IN AGRICULTURE. Professor Joe P. Bail, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; August 1965; Single copy free. A guide on agricultural occupations for use in counseling high school students. Includes qualifications for agricultural occupations, type and location of agricultural occupations and some typical job titles.

IDENTIFICATION OF OFF-FARM AGRICULTURAL OCCUPATIONS - AG. ED. PUBLICATION #3. Ralph P. Barwick, Department of Agricultural Education, College of Agricultural Sciences, University of Delaware, Newark, Delaware; March 1965; Free in reasonable number. Identifies present and projected employment in off-farm agricultural occupations in Delaware by occupational title. (335 titles). Could be useful in pointing out the many job opportunities in off-farm agricultural occupations.

JOBS REQUIRING KNOWLEDGE AND SKILL IN AGRICULTURAL SUBJECTS. Phipps, Lloyd J. and Others, Agricultural Education Division, 357 Education Building, University of Illinois, Urbana, Illinois 61803; 1965; $.30. A list of jobs in rural areas requiring knowledge and skill in agricultural subjects. The list is an outgrowth of a research project to identify off-farm agricultural jobs.

OCCUPATIONS OF FORMER STUDENTS OF VOCATIONAL AGRICULTURE IN ARIZONA - AGRICULTURAL EXPERIMENT STATION REPORT NUMBER 227. John R. Williams, Department of Agricultural Education, University of Arizona, Tucson, Arizona; July 1965; Single copy free to State staff members in agricultural education. A report on a study of all former students who studied vocational agriculture for two or more years during the ten year period between September 1953 and June 1962. The main emphasis was to determine the present occupations of these former students, what additional post-high school education they have received, and their opinions about the effectiveness of selected phases of the vocational education program in agriculture in preparing them for the responsibilities of their present positions.

OPPORTUNITIES FOR YOU IN AGRICULTURAL EDUCATION. American Association Teacher Educators in Agriculture, Agricultural Education Department, Montana State University, Bozeman, Montana; 1965 Revised, 100 to 150 - 5¢ each; 500-1000 - 4 1/2¢ each; 1000 or more - 4¢ each. Blue and Gold, 3 1/2" x 8 1/2", recruitment brochure for trainees in teacher education in agriculture, 5 pages.

REPORT ON A STUDY OF STUDENT INTERESTS IN FIVE AGRICULTURAL OCCUPATIONS GROUPS IN THREE AREAS OF NEW YORK STATE. Harold L. Noakes, Bureau of Agricultural Education, State Education Department, Albany, New York 12224; June 1965; single copy free to State staff members. A summary of the interests of more than 6700 eighth, ninth, and tenth grade students in 22 school districts in preparing for agricultural occupations. The methods for conducting the survey and for using the results obtained in estimating enrollment in agricultural courses are outlined.

A SUMMARY OF A SURVEY OF THE EMPLOYMENT OPPORTUNITIES AND COMPETENCIES REQUIRED FOR ENTRY IN SELECTED OCCUPATIONS IN AGRICULTURAL BUSINESSES IN THREE COMMUNITIES IN NEW YORK STATE, 1964. Frank J. Wolff and John Gradoni, available from the Bureau of Agricultural Education, State Education Dept., Albany, N. Y. 12224. April 1965; single copy free to State staff members. The report of a survey made prior to the writing of courses of study in agricultural business. Fifty-seven firms and/or agencies representing 24 businesses and covering seven agricultural occupational families were included in the sample. The methods used in conducting the survey and the resulting data are reported in detail.

✓A TEACHING PROCEDURE FOR CAREERS IN VOCATIONAL AGRICULTURE. I. C. Cross, Department of Vocational Education, Agriculture Section, Colorado State University, Fort Collins, Colorado. July 1965; No charge - limited quantity. A teaching procedure and bibliography of materials useful in acquainting students with careers in non-farm agricultural occupations.

SUGGESTIONS FOR ORIENTING VOCATIONAL AGRICULTURE STUDENTS TO EMPLOYMENT OPPORTUNITIES IN FARM BASED BUSINESSES AND AGENCIES. AG. ED. #5. James H. Hutchinson, Vocational Agricultural Education Department, Louisiana State University, Baton Rouge, Louisiana; February 1965; Copy free of charge and available as long as supply lasts. A unit of instruction providing basic information about non-farm agriculture.

OCCUPATIONAL OPPORTUNITIES AND TRAINING NEEDS OF YOUTH FOR NON-FARM AGRICULTURAL JOBS:

In Alexandria-Pineville, C. L. Mondart, Sr. and C. M. Curtis, Vocational Agriculture Education #4, January 1965; 63 pages.

In the Metropolitan areas of Louisiana, C. L. Mondart, Sr. and C. M. Curtis, Vocational Agriculture Education #6, February 1965; 60 pages.

In the Shreveport-Bossier City Area, C. M. Curtis and C. L. Mondart, Sr., Vocational Agriculture Education #8, March 1965; 50 pages.

In the Baton Rouge Area, C. M. Curtis and C. L. Mondart Sr., Vocational Agriculture Education #8, March 1965; 59 pages.

In the Metropolitan Area of New Orleans, C. M. Curtis and J. H. Hutchinson; Vocational Agriculture #9, February 1965; 64 pages.

In the Monroe-West Monroe Area, C. M. Curtis and Anthony Mumphrey; Vocational Agriculture Education #10, May 1965; 57 pages.

In the Lake Charles Area, C. M. Curtis and C. L. Mondart, Sr., Vocational Agriculture Education #11, March 1965; 54 pages.

In the LaFayette Area, C. M. Curtis and J. H. Hutchinson, Vocational Agriculture Education #12, March 1965; 60 pages.

The above reports are state-wide studies designed to locate and identify jobs in non-farm agriculture by title, along with a description of such jobs including knowledge and skills needed for job entry. Publications are free as long as the supply lasts. Available from the Vocational Agricultural Education Department, Louisiana State University, Baton Rouge, Louisiana.

PLANT SCIENCE AND SOILS

AGRONOMY JUDGING HANDBOOK. Monograph 66. Denver B. Hutson, Department of Vocational Education, University of Arkansas, Fayetteville, Arkansas 72701; January 1965; single copies free to supervisors and teacher trainers. Developed for the purpose of providing uniformity in instruction for students preparing to participate in contests involving seed identification, classifying seed for planting purposes, judging market grain, judging hay, and judging cotton, 47 pages.

AG-SCIENCE DEMONSTRATIONS ON WEED CONTROL. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; February 1965; complete set, $.75 postpaid. Individual packets $.25 each, postpaid. This is a series of demonstrations on weed control that uses small flats or plots to show the effect of pre- and post-emergence application of herbicides. Instructions and packets of material needed for these demonstrations are available as listed below:

Demonstration Number	Title
1	The Effect of a Pre-emergence Herbicide on Weed Growth
2	The Effect of a Post-emergence Herbicide on Weed Growth
3	The Effect of 2,4-D on Broad-leaved Plants in Lawns

ASEXUAL PROPAGATION OF PLANTS, SET OF 20 SLIDES. Sanderson and Noll; Raymond M. Clark, MATVA, 340 Erickson Hall, Michigan State University, East Lansing, Michigan; September 1965; $7.00. Set of color slides with mimeo script describing common methods of propagating plants. Primarily deals with ornamental plants.

CARE AND MANAGEMENT OF LAWN, AGDEX 273/10. Robert W. Miller, Department of Agronomy; Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $6.00. A series of 41 color slides and script depicting management practices in lawns. To accompany the teacher's guide "Establishment and Maintenance of Lawns."

CONTROLLING GIANT FOXTAIL, SLIDEFILM 794. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; October 1965; $2.31 postpaid. This is a single frame slidefilm of 37 frames in color. It discusses ways of preventing losses due to giant foxtail.

CORN DISEASES, SLIDEFILM 732. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; October 1965; $2.61 postpaid. This is a single frame slidefilm of 48 frames in color. It shows typical symptoms of some of the common diseases which attack corn. A few of the major headings are: Leaf Blights, Storage Rots, Rusts, Stewart's Disease, Stalk Rots, Ear Rots, Smuts, Corn Dwarf Mosaic, etc.

DEMONSTRATIONS IN FARM CROPS. Clark, Raymond M., and Boyd Churchill, Office of Publications, College of Education, Michigan State University, East Lansing, Michigan; October 1965; $1.25. This is one of a series of bulletins on "Demonstrations" produced for use by teachers of agriculture and others in their instructional program.

ESTABLISHMENT AND MAINTENANCE OF LAWNS, AGDEX 273. Robert Eby, Larry Hazen, and Howard Nowels, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $.75; The manual is prepared as a teacher's guide. It is divided into two sections. Section one, "establishment of new lawns," contains seven problem areas and section two, "care and maintenance of established lawns," contains seven problem areas. A 50 question objective type examination is included, 59 pages.

FUNDAMENTALS OF PLANT IDENTIFICATION, AGDEX 100/00. Clarence Fridline, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $3.00. The slides and script give the fundamentals of plant identification. The illustrations were prepared by a commercial artist. Series of 18 color slides (script).

✓✓ HOME GROUND IMPROVEMENT. Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; June 1965; Free single copy to supervisors and teacher trainers. Basic teaching unit, 71 pages.

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IDENTIFICATION OF WEEDS, PART II, SLIDEFILM 792. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; October 1965; $1.99 postpaid. This is a single frame slidefilm of 26 frames in color. It shows 20 weeds which are common problems in growing crops. Leaf and floral characteristics are shown for identification purposes.

✓ THE IMPORTANCE OF PASTURE AS A CROP, HS-20. Staff, Department of Agricultural Education, University of Kentucky, Lexington, Kentucky; 1965; Free - one copy to supervisors, teacher educators and teachers.

AN INTRODUCTION TO PLANT DISEASES, SERVICE BULLETIN NUMBER THREE. Agricultural Education Department Staff, Department of Agricultural Education, University of Arizona, Tucson, Arizona; June 1965; one copy free to State staff members in Agricultural Education. A source unit prepared for use by high school students designed to help them understand basic principles governing plant diseases. Specific diseases are discussed only as examples of types of plant diseases. The set of laboratory experiments and demonstrations should make this unit more interesting and useful to high school students.

LAND JUDGING INSTRUCTIONAL MATERIALS. Brengle, Danielson and Romine, Vocational Education Department, Agriculture Section, Colorado State University, Fort Collins, Colorado; June 1965; No charge - limited quantity. Land judging materials designed to acquaint students with land judging techniques.

LAND USE AND MANAGEMENT PROGRAM. F. Glade Loughry, Norman K. Hoover, and T. Dean Witmer, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; September 1965; $.30. This booklet centers on the official land judging scorecard. It attempts to provide information and suggestions for teachers and students on how to judge land. Available in quantity.

MAIZE DWARF MOSAIC OF CORN (VAS 4049). Vocational Agriculture Service, December 1965; $.12 postpaid. (write for quantity prices). This 8-page subject-matter unit discusses the spread, damage, symptoms and control of this new corn disease.

PLANNING THE PASTURE PROGRAM. Staff, Department of Agricultural Education, University of Kentucky, Lexington, Kentucky; 1965; Free - one copy to supervisors, teacher educators, and teachers.

PLANT DISEASES (BASIC TEACHING UNIT). Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; August 1965; Free - single copy to supervisors and teacher trainers. Basic teaching unit, 48 pages.

PRUNING AND TRAINING BRAMBLE FRUITS AND HIGHBUSH BLUEBERRIES (VAS 4048). Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; December 1965; $.12 postpaid. (write for quantity prices). This 8 page subject matter unit discusses the growth, fruiting habits, pruning, and training of bramble fruits (raspberries, blackberries, and blueberries). Different methods and steps of training and pruning are illustrated.

SOME COMMON CROP AND WEED PLANTS, AGDEX 100/40. Clarence Fridline, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $12.00. A series of 76 color slides of 51 Ohio crop and weed plants. Each slide is of an actual plant or part of a plant and is accompanied with a descriptive script.

SOME COMMON CROP AND WEED SEEDS, AGDEX 100/40. Clarence Fridline, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $8.00. A series of 52 color slides of 52 Ohio crop and weed seeds. Each slide is a close-up of an actual seed and is accompanied by a descriptive script.

SOME IDENTIFYING CHARACTERISTICS OF 52 OHIO SEEDS, AGDEX 100/40. Clarence Fridline, Vocational Agriculture Instructional Materials Service, Department of Agricultural Education, 2120 Fyffe Road, Columbus, Ohio 43210; 1965; $.80. Contains brief description and line drawings of 52 common crop and weed seeds of Ohio. The description is written for high school student use. Both common and scientific terms are used, 16 pages.

USING FERTILIZERS AND OTHER SOIL-BUILDING MATERIAL, UNIT HS-A. Staff, Department of Agricultural Education, University of Kentucky, Lexington, Kentucky; 1965; Free - one copy to supervisors, teacher educators, and teachers.

VO-AG LAND-USE SELECTION CARDS. Vocational Agriculture Service, 434 Mumford Hall, Urbana, Illinois; September 1965; $.37 per package of 25, postpaid. These are 5 1/2 x 8 inch cards, printed on both sides, that are used for Land-Use Selection Contests. Students judge soil on the basis of its physical features -- color, texture, structure, moisture-holding capacity, ease of water and air movement, depth of soil favorable for root growth, degree of erosion, and slope. Then they decide on the land class, use, and management practices needed.

SUPERVISION AND TEACHER EDUCATION

A COMPARISON OF METHODS OF TEACHING FIREARM AND HUNTING SAFETY IN SELECTED PENNSYLVANIA SCHOOLS, BULLETIN 711. Frank Anthony, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; August 1964; Free. Results of a teaching experiment involving junior high school boys and girls concerning firearm and hunting safety are compared.

EVALUATION OF INSTRUCTIONAL ACTIVITIES B 1764. Phil Teske, Education Building, Purdue University; Free - 1 copy per person. Checklist of good teaching practices, designed for use by the teacher as a self-evaluation devise relative to planning and presenting units of instruction, classroom management, and personal characteristics of the teacher. Particularly useful with student teachers.

ORGANIZING AND USING THE ADVISORY COUNCIL. Department Mimeo, Agricultural Education, Virginia Polytechnic Institute, Blacksburg, Virginia 24061; January 1965; Free. Mimeo -- 11 pages. Single copy only to supervisors and teacher-trainers.

PILOT PROGRAMS IN AGRICULTURAL EDUCATION, INTERIM REPORT. Phipps, Lloyd J. and others, Agricultural Education Division, 357 Education Building, University of Illinois, Urbana, Illinois 61803; June 1965; $.30. A description of outcomes of pilot programs in agricultural education designed to implement the Vocational Education Act of 1963.

A PROPOSAL FOR ORIENTATION OF NEW TEACHERS OF VOCATIONAL EDUCATION. C. E. Dean and Staff, The Teacher-Training Department, A & T College, Greensboro, North Carolina; 1965; one copy free.

THE RECRUITMENT PROGRAM FOR STUDENTS IN THE SCHOOL OF AGRICULTURE. The Ag-Ed Staff, The Teacher-Training Department, A & T College, Greensboro, North Carolina; 1965; one copy free.

TEACHER ADOPTION OF A NEW CONCEPT OF SUPERVISED PRACTICE IN AGRICULTURE - RESEARCH PUBLICATION NO. 4. Texton R. Miller, Agricultural Education Department, North Carolina State University, Raleigh, North Carolina; October 15, 1965; $.25. A research study which shows the extent of adoption of a new concept of supervised practice by teachers of agriculture in North Carolina. Ten variables were correlated with adoption level of concept. An adoption level scale was developed from research in sociology. Implications were drawn for pre-service and inservice program planning.

TEACHING AIDS AND MATERIALS

AGRICULTURAL FILE INDEX. A. K. Jensen, Agricultural Education Department, Clemson University, Clemson, South Carolina; 1965; Free single copy while supply lasts. This is a filing system designed for departments of vocational agriculture. The same system applies to teacher files and student bulletin files. It includes a desk top file key with printed gummed labels for folders and bulletin boxes.

BEEF MARKETING - A TEACHER'S UNIT PLAN, TEACHER EDUCATION SERIES, VOL. VI, No. 4, 1965. R. Gene Daugherty, Gene M. Love, and Glenn Z. Stevens, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; September 1965; $.40, available in quantity. This unit plan is divided into four problem areas. It includes a suggested list of teaching-learning resources, suggested class activities, and a multiple-choice test. Designed for the use of teachers of adult and all-day classes.

BEEF MARKETING - A STUDENT HANDBOOK, TEACHER EDUCATION SERIES, VOL. VI, No. 5, 1965. R. Gene Daugherty, Gene M. Love, and Glenn Z. Stevens, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; September 1965; $1.00 available in quantity. This 65 page book includes subject matter information on four problem areas. It was designed to meet the needs of students studying beef marketing for facts and information. The book is designed to supplement Beef Marketing - A Teacher's Unit Plan.

COLLECTING AND PRESERVING SPECIMENS FOR USE BY TEACHERS OF VOCATIONAL AGRICULTURE, PROFESSIONAL SERIES BULLETIN NO. 8, REVISED. Clark, and others, Office of Publications, College of Education, Michigan State University, East Lansing, Michigan; September 1965; $.50. Directions for collecting and preserving specimens of plants, insects, small animals, forest products, soils and seeds.

A COMPARISON OF PROGRAMMED AND LECTURE-DISCUSSION METHODS OF TEACHING FARM CREDIT TO THE HIGH SCHOOL YOUTH AND ADULTS, BULLETIN 722. William L. Hull, David R. McClay, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; August 1965; Free single copy. This is a research report on a teaching experiment conducted with high school youth and adults involving programmed teaching aids dealing with farm credit.

DAIRY CATTLE NUTRITION - A STUDENT HANDBOOK, TEACHER EDUCATION SERIES, VOL. VI, NO. 3. William J. Brown, Jr., and Gene M. Love, Department of Agricultural Education, 101 Ag. Education Building, The Pennsylvania State University, University Park, Pennsylvania 16802; September 1965; $1.00 available in quantity. This is one of two books available on Dairy Cattle Nutrition. This one is designed for students. Another is available for teachers. Subject matter is divided into four problem areas. These areas are: (1) Classifying Feeds, (2) Understanding Digestion and Feed Utilization, (3) Evaluating Forages, and Formulating Feed Rations, and (4) Feeding Dairy Cows.

DAIRY CATTLE NUTRITION - A TEACHER'S UNIT PLAN, TEACHER EDUCATION SERIES, VOL. VI, NO. 2. William J. Brown and Gene M. Love, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; September 1965; $.40 available in quantity. This is one of two books available on Dairy Cattle Nutrition. This one is designed for the teacher. The publication is divided into four problem areas. It includes a suggested list of teaching-learning resources, objectives and suggested class activities for each problem area. A fifty question multiple-choice test is included.

EDUCATIONAL EFFECTIVENESS OF THREE SEQUENCES OF SCHEDULING CLASSES AND OF THREE PATTERNS OF SUPERVISION AND INSTRUCTION IN AN INSERVICE EDUCATION COURSE FOR TEACHERS, TEACHER EDUCATION RESEARCH SERIES, VOL. V, NO. 2. Gene M. Love and Glenn Z. Stevens, Department of Agricultural Education, 101 Ag. Ed. Building, The Pennsylvania State University, University Park, Pennsylvania 16802; 1964; Free single copy. A research report on an experiment to test the effectiveness of selected class scheduling techniques of selected teaching methods for inservice classes for teachers of agriculture. A modified latin square design was used. Test data from teachers were analyzed by analysis of covariance.

LIST OF RECENT BULLETINS SELECTED FOR USE IN ARIZONA DEPARTMENTS OF VOCATIONAL AGRICULTURE. SERVICE BULLETIN NO. FIVE. Phil W. Neilson and John R. Williams, Department of Agricultural Education, University of Arizona, Tucson, Arizona; June 1965. An evaluated list of recent bulletins prepared in Arizona and other states of similar climatic conditions that were considered to be of use in teaching various phases of vocational agriculture in Arizona.

SELECTED FILMS, FILMSTRIPS AND SLIDES. David M. Tugend, Department of Agricultural and Extension Education, University of Maryland, College Park, Maryland 20742; August 1963; single copy free. A comprehensive listing of films, filmstrips and slides available free of charge from various commercial concerns, foundations and other source, covering most subject areas in agriculture.

SELECTED REFERENCE BOOKS FOR DEPARTMENTS OF VOCATIONAL AGRICULTURE, SERVICE BULLETIN NO. FOUR. O. W. Mortenson and John R. Williams, Department of Agricultural Education, University of Arizona, Tucson, Arizona; June 1965; no charge for single copy. Limited number available to State staff members in Agricultural Education. An evaluated list of books believed to be most useful in teaching all areas of vocational agriculture in Arizona high schools.

SELECTED REFERENCES AND AIDS USEFUL IN TEACHING AGRICULTURAL MECHANICS. Robert E. Norton, Agricultural Education Division, Stone Hall, Cornell University, Ithaca, New York; August 1965; single copy free to supervisor and teacher-trainer staffs. A selected listing of agricultural mechanics textbooks, bulletins, charts, films, filmstrips, slides and other educational materials divided into ten major areas of concern. Includes a master list of 115 addresses, both commercial companies and educational institutions, having materials available plus a brief description of each item evaluated.

A SOURCE LISTING OF FREE AND INEXPENSIVE TRAINING AIDS FROM COMMERCIAL SOURCES FOR VOCATIONAL AGRICULTURE. Phil Teske, Education Building, Purdue University; June 1965; free - 1 copy per request.

TEACHING AIDS FOR TEACHERS OF VOCATIONAL AGRICULTURE, MONOGRAPH 65. J. C. Atherton, Department of Vocational Education, University of Arkansas, Fayetteville, Arkansas 72701; March 1964; Single copies free to supervisors and teacher trainers. A guide dealing with effective use of instructional materials from the standpoint of preparation for using various aids, appropriate presentation techniques and evaluation, 59 pages.

TEXTS AND REFERENCES FOR INDIANA DEPARTMENTS OF VOCATIONAL AGRICULTURE AE-64. Phil Teske, Education Building, Purdue University; July 1965; free - 1 copy per request. List of texts, references and magazines available for teaching vocational agriculture. Each item is coded for use as a text or reference, and grade level for which the volume is appropriate is included.

WORKBOOKS available from: Agriculture Dept., East Texas State Univ., Commerce, Texas

A Workbook for Training a Forestry Worker by T. G. Hemby, Jr.

A Workbook for Training an Artificial Inseminator by James Maxton

A Workbook for Training a Dairy Farm Worker by Jack E. Rowland

A Workbook for Training a Beef Cattle Ranch Worker by John Chumbley

A Workbook for Training an Agricultural Chemical Sales and Service Man by Bobby Benbow

A Workbook for Training a Veterinarian Assistant by Joe Lea

A Workbook for Training an Agricultural Machinery Repair Man by Earl Davis

February 1, 1966; Free to State supervisors and teacher training institutions. Workbooks to be used as an aid in teaching Agricultural occupations.